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PACIFIC FISHERMAN

INPAC Registers Broad Gains . . p9

New Certi-Fresh Stix Plant . . . p33

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A MILLER FREEMAN PUBLICATION

THREE NATIONS in conference, while a fourth observes. International North Pacific Fisheries Commission meeting in Seattle. Japanese section in foreground; Canadians at right; U.S. in background; U.S.S.R. observers extreme right rear.

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PACIFIC FISHERMAN

Vol. 54 No. 13

DECEMBER 1956

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A MILLER FREEMAN PUBLICATION

Pacific States Call-In the Feds On Off-Shore Gillnet Problem

● Federal help at the State Department level was sought by the Pacific Marine Fisheries Commission late in November as it grappled with the threat to salmon conservation posed by the rise of off-shore gillnetting.

The Tri-State Commission did not request the Federal Government to take-over the problem, but it asked the State Department, working with the commission, to consult with Canada and determine just exactly (1) what Canada will do on her part to cope with the problem; (b) what control measures on the part of the Pacific States will be satisfactory to Canada as concurrent American action.

Once clear, this international understanding will be embodied in identical measures and submitted to the three legislatures in an effort to secure action before the 1957 salmon season starts.

By this means the Tri-State Commission seeks to handle this ocean fishing problem by state action, without sacrifice of its fundamental position as the agency through which the states apply their rights to control the fishing activities of their citizens.

If passage of the measure is not secured in all three legislatures—as required under the Tri-State compact, then the states' efforts to maintain jurisdiction will fall, and the Federal Congress may be expected to take a hand.

● The action came after three grinding days in smoke-filled rooms, days when at times there appeared little prospect of agreement. In the end, the action fell narrowly short of being unanimous, both in vote of the commission and of its advisory committee.

The San Francisco meeting demonstrated immediately that there were several definite groups which did not agree with the hitherto almost unchallenged theme that "ocean gillnetting must stop."

These positions of disagreement may be briefed thus:

1. "Control Group," whose thinking was that it is unwise and unfair—even dangerous to the general objective—to prohibit ocean fishing by a form of gear which is widely accepted as suitable in inshore waters; and that it is more equitable to seek measures which would *prevent* the gear from having a destructive effect upon conservation than to *prohibit* such gear.

2. *Otter trawlers,* some of whom have interest in the potential of the new fishery, while others oppose a ban against *all* offshore net fishing as unwarranted at a time when only gillnet fishing is under attack.

3. *Oregon gillnetters,* who were voted out of the coastal streams of that state by an initiative measure in November, and who now feel that the only field left for them is gillnetting outside territorial waters.

4. *Southern California* net fishermen, who feel that a law against "net fishing for salmon" someday could be made to destroy them by changing the single word "salmon" to "fish." They fear control as a possible "opening wedge."

● In the consultations with Canada the Tri-State Commission will also seek means by which two points of friction between the fishermen of the two countries can be reduced and eliminated. These touch concurrent action between Canada and the Pacific states on the matter of (a) uniform closed season on fishing for petrale and Dover sole in the winter "spawning deeps" discovered off the coast; (b) uniform trolling seasons by the two countries designed to encourage escapement of spawners of depleted stocks.

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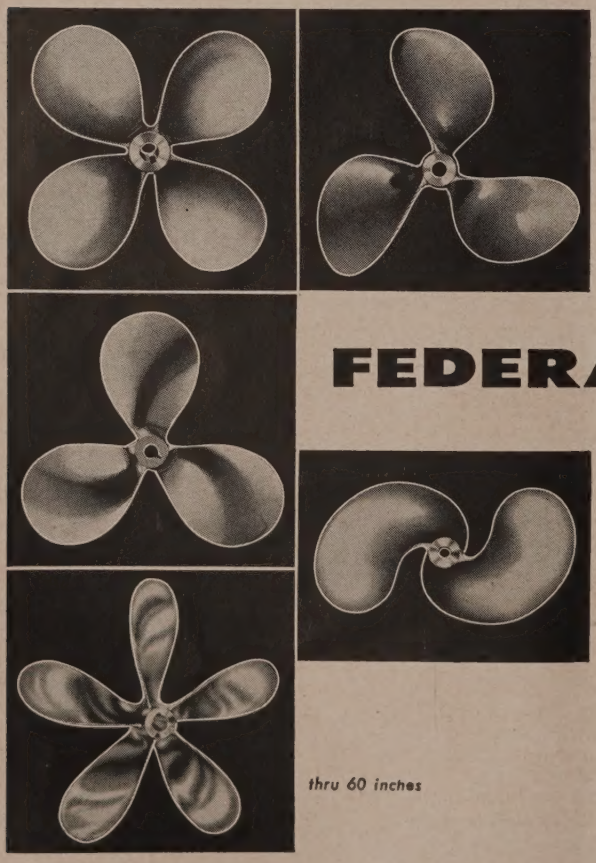

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Meet A Master of the Shrimp Hunt---
JOHN SANTOS CARINHAS

Ask anyone in the swim around Gulf ports these days what they know about John Santos Carinhas—and each will agree that Captain Santos played a mighty important part in putting the Gulf on the shrimping industry map. Today one of the Gulf's largest takers, processors, and shippers of shrimp, "Captain John" has won the respect and affection of everyone in the hunt. From Florida to Texas and most points in between, he's a symbol of the strength and vitality that stamp the industry today.

Operating out of Patterson, Louisiana and Brownsville, Texas, Captain John catches 1,125,000 pounds—that's 10,000 barrels—of shrimp, plus between 150 and 200 million menhaden a year. His fleet now numbers fifteen shrimp and twelve menhaden boats, plus some seven or eight auxiliary vessels.

Actually, he started after sardines before he came up with shrimp. Sardines are the economic mainstay of Olhao, Portugal, where he was born John Santos Carinhas. John began fishing at eight, learned his trade well (including the vital art of net making and mending) and saved enough money to bring him to New York at seventeen. "I wanted to make more money," he says simply.

After two years he hooked up with Captain Wes Robinson, then fishing for menhaden from Fulton, Florida. A couple of southern sorties a year was enough for Santos, and in 1915 he called Florida his home for good. Shrimp were the order of the day, and he set out to serve the biggest orders he could find.

The first boat he owned — the *Pelican,* out of Fernandina — was a 22-footer on which he put up his own cabin, and made his own nets. Soon he was doing likewise for his fellows in his spare time. Captain John was on his way.

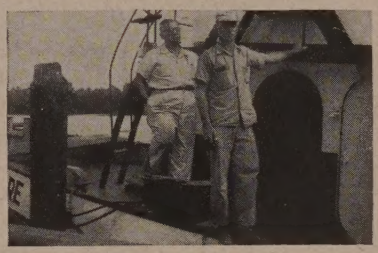
Sorting, weighing, packaging jumbo shrimp.

With each different command the fleet grew, and Captain John ranged further and further asea in search of new and richer sources of shrimp. Trips of five and six days, with each ship carrying as many tons of ice, replaced the former close-to-home standard operating procedure.

Captain John took time off in 1925 to marry the daughter of a shrimp fisherman from St. Augustine, Fla. Among his subsequent new boats was the *Johnnie Junior,* named for his firstborn son, John Santos, Jr.

Along about this time, Santos turned his attention to greatly increasing the horsepower of his new craft. When asked by the U. S. Government why he called one full diesel 100-hp boat the *G-Man,* Captain John replied that it, too, got what it went after—and he heard no more from Washington.

After 1930, Captain John followed the shrimp through divers waters—Georgetown and Young's Island, South Carolina; St. Augustine; Galveston, Texas. These years saw the birth of four more children — Frances Joyce, Clementina Ann, Joseph Edward, and Julia Dianne. It was at this time, too, that Bright Kornegay joined forces with Captain John. He's been an indispensable right-hand man ever since.



Bright Kornegay (left) on tugboard.

In 1939, Captain John moved his fleet to what has been styled the "Shrimp Capital of the World"—Morgan City, Louisiana — and went right on building larger and larger boats. The enormous quantities of shrimp he caught quickly drew the glare of national publicity and put shrimp in the front ranks of luxury dishes in homes and restaurants across the nation. (The largest haul he can recall for one of his boats is the 156 barrels taken by the *Constitution* on a five-day trip out of Morgan City.)

A true pioneer, from the days of the early gasoline-driven boat to the present-day high-powered diesel craft, Captain John has charted the way for the shrimp industry in the Gulf. Today his fleet uses the very latest in fishing techniques and devices — airplanes, radios, depth recorders, direction finders, automatic pilots, loran and even walkie-talkies from small boats.

It's expensive—but it increases efficiency and adds immeasurably to the haul. "And that's what counts," says Captain John. "People like shrimp. I can sell all I can get—and I'll go as far as I have to, to get all I can sell."

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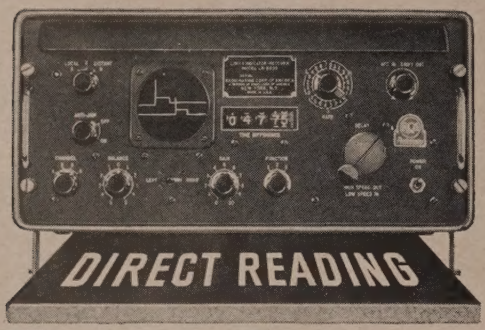

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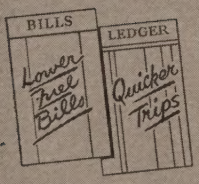

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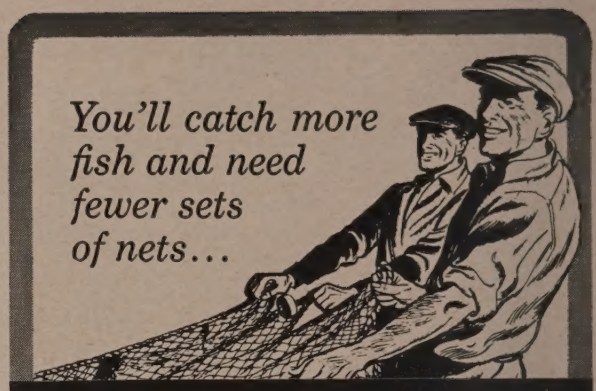

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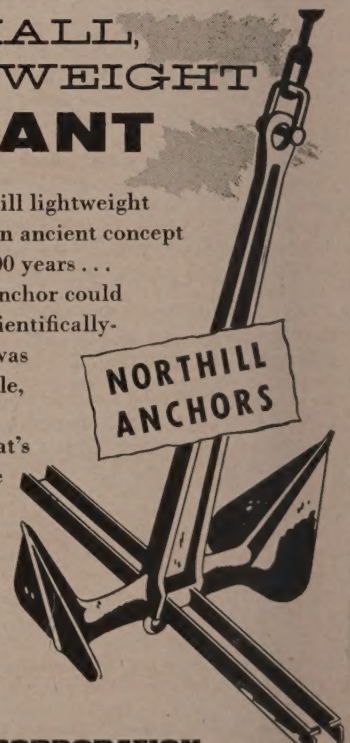

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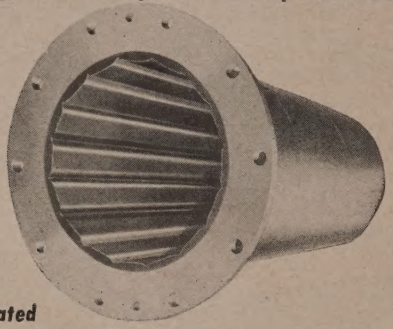

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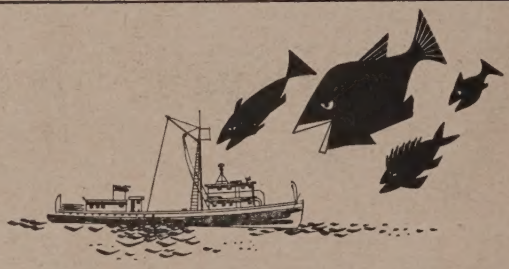

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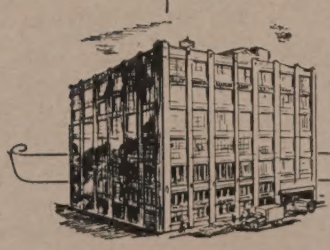

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PACIFIC FISHERMAN DECEMBER 1956

BROAD GAINS

Registered in North Pacific Research and Relationships

● Significant advances in solution of North Pacific fisheries problems were evident at the annual meeting of the International North Pacific Fisheries Commission, which closed at Seattle November 16 after a fortnight of conference, report and planning.

● Confidence in the capability of the scientific tools tested emerged from the research sessions; and plans were drafted for substantial step-up of investigations along the most promising lines.

● Gratified with the gains made in the search for means of distinguishing between American and Asian salmon and the waters used by each, the commission undertook for the first time the second of its primary responsibilities under the treaty: preliminary study of the North American salmon, halibut and herring fisheries and their continuing qualification for abstention from fishing by Japan.

● Soviet Union observers sat in the meetings of the Conference for the first time, introducing a new factor whose future effect none could see clearly.

● What of 1957? Research will resume early in the spring all the way across the Pacific.

But what of Japanese commercial operations? They will be held well within treaty obligations, but the Japanese could give no assurance that the pressure would be relaxed while determination of the identity and range of the continental stocks is perfected.

Distinction

● The Seattle meeting of the International North Pacific Fisheries Commission differed from its predecessors in two primary respects.

1. It initiated consideration of the problem of determining qualifications of North American salmon, halibut and herring fisheries for abstention beyond the five-year period for which this condition was bound by the treaty —a period which expires in 1958.

2. The presence of the Soviet Union observers, with the implications conveyed by their request for an invitation. They were late in arriving, but made themselves wholly agreeable. Whether they hoped to come again, they did not say.

Abstention Problem

● Canada and the United States, in accord with the direction of the 1955 conference, filed their preliminary cases to show that North American salmon, halibut and herring stocks qualify for Japanese abstention from fishing through:

a. Historic utilization;

b. Scientific evidence that more intensive exploitation will not provide a substantial increase in yield which can be sustained from year to year;

c. Regulation designed to maintain and increase productivity;

d. Scientific study designed to determine if stocks are fully utilized and regulated under conditions to promote sustained yield.

These cases will be studied by a special committee, which will meet in Tokyo in March, and which will make initial report to the full commission in the fall of 1957. Further studies may then be required preliminary to the commission making its first determination on continuation of abstention in 1958.

Officers and Meetings

● George R. Clark, deputy minister of fisheries for Canada, was elected chairman of the international commission for 1956-7. He succeeds Edward W. Allen of Seattle, who became secretary. Iwao Fujita of Japan was elected vice chairman.

Of the commission's two standing committees, John H. Clawson of the United States will head the Biology and Research Committee for 1956-7; and Mr. Fujita will be chairman of the Committee on Finance and Administration.

The Special Abstention Committee

SCIENTISTS of Japan, left, Canada, and the United States, right, study the research program of the International North Pacific Fisheries Commission, the largest fisheries biological program ever mounted.

American Section—From the left, Commissioners John H. Clawson, Milton E. Brooding chairman; John L. Farley. Sitting behind Mr. Brooding's name card, William M. Terry, an adviser. Edward W. Allen, the fourth American commissioner, was chairman of the commission and presiding when the picture was taken.

will meet in Tokyo March 11, 1957, with the Biological and Research Committee meeting there March 18.

Fourth annual meeting of the commission will be held in Vancouver, B.C., Nov. 4, 1957; with the Biological and Research committee preceding it by one week.

The commission voted to accept the invitation of Canada to make its permanent headquarters in the new building which is being erected for the Fisheries Research Board of Canada at the University of British Columbia, where Canada will provide it with accommodations without charge.

Keynote

● Regional responsibility for oceanic fisheries conservation was sounded as the keynote of the 1956 meeting of the International North Pacific Commission by its Chairman Edward W. Allen, when he said:

"It is better to let the nations directly involved in a regional fishery work out its destiny rather than to attempt to superimpose on them some universal pattern. People as well as fish differ from area to area. In the long run, those whose stable livelihoods depend upon the permanent maintenance of a natural resource will take a sounder interest in such maintenance than those whose interest is casual. . . History indicates that those most directly concerned with the resource awake to the necessity for its preservation and are most likely to take the essential steps toward that end. It is this natural reaction which is at the very heart of those notable provisions of this treaty which have become known as the Principle of Abstention".

Japanese position was voiced by Koh Chiba in these words: "Effective conservation of fisheries resources can be carried out, within the concept of the free seas, through cooperation among the interested nations and the employment of intelligent and scientific conservation measures. . . This fundamental fact is of great significance for the future . . . since it indicates the guiding spirit in which this commission was established."

Mr. Clark, speaking for Canada, said the commission's "tremendous program of scientific research" has never "been matched in fisheries work elsewhere in the world"; and that the "willingness for cooperation and coordination of effort is outstanding in the field of international affairs".

Remarkable progress of the scientific studies was highlighted by Milton E. Brooding, American section chairman, thus:

"Our great concern about the ocean habits of our salmon . . . is still unanswered but . . . considerable progress has been made in learning the facts of this situation. Our research, if continued at the present rate, should soon give our three nations the necessary information on which to make a proper judgment."

What Research Found

● "Breath-taking progress" was the way one scientist characterized the 1956 advance in the field of INPAC's scientific studies—and scientists are notably conservative in their appraisals. This appraisal was based upon the reports and reviews over a period of almost two weeks.

Other scientists who had seen the early investigations of the Halibut and Sockeye enterprises at first hand expressed the feeling that INPAC, for all its vastly greater field of operations, was moving at a faster pace than its predecessors—a pace made possible in part at least because of the scientific pioneering of the forerunners.

What are some of these results? Briefly, *very* briefly, they may be summed-up thus:

Ocean Distribution—Fishing by research vessels of all three nations further pin-pointed the occurrence of salmon in the ocean during the late spring and summer months, particularly with reference to latitude and surface temperatures. This fishing provided samples for use in racial studies.

Japanese Section—Front row, Commissioners K. Nakabe, S. Masuda, I. Fujita, K. Chiba. Rear row, S. Mizota, H. Tominaga, Motosaku Fujinaga, H. Ohki, and Kisaburo Taguchi.

Racial Studies — Significant results were obtained in the efforts to distinguish between Asian and American salmon by means of physical characteristics. This was particularly true with respect to studies of scale structure, and also in the research based on such characteristics as vertebra counts, gillrakers, and body measurements. The United States engaged most heavily in this field, with results from Japanese studies tending to confirm findings.

Racial studies also were pursued along the lines of bone structure, associated organisms and blood serum types.

Tagging—United States' studies in this field yielded concrete results along two distinct lines:

(a) Demonstrated that salmon caught unharmed by means of purse seines operated in blind sets on the high seas; and that where fish are handled very carefully and kept in water at all times, they could be tagged without injury or impairment.

(b) Produced the first actual recoveries in continental waters of salmon tagged in mid-ocean. Of the Red salmon tagged along the Aleutians, and out beyond the abstention line, all recoveries were from Alaskan areas, and all above the Alaska Peninsula. A few Chums, constituting 0.4% of tagging, were recovered in the Japanese ocean fishery or Asian streams. Recovery from the American fishery or streams worked out at 3.9%. Obviously, only recoveries of mature tagged fish could be expected in inshore waters.

Oceanography — Canada took the lead in this field of research and reported the most definitive results, pointing toward hypothetical boundaries to salmon migration. One, based primarily on salinity, but also associated with temperature, was traced near 40° North Latitude; while another, called a Polar Front, appeared as "a shear zone or area of relatively sudden change in water quality" to the north and northwest of the Aleutian Islands in the vicinity of 180° Longitude, or westerly from that meridian.

King Crab—Japan and the United States continued their studies of the King crab population by means of measurement of samples from the catch; by tagging; and by study of the life history through fertilized eggs and collection of juvenile crabs. American research proved through tagging that all male crabs in Bering Sea do not shed their shells annually.

What Science Seeks

● Looking into 1957, the national sections composing the International North Pacific Fisheries Commission will mount researches on a stepped-up program. Overall expenditure is difficult to fix because of differences in costs, currencies and accounting; but the American section's budget for the next fiscal year, beginning July 1, 1957, is known to approximate $900,000.

With the 1956 demonstration of successful tagging and encouraging results of racial studies and distribution, these aspects of the American section's program are expected to receive primary emphasis. Canada will continue to specialize in oceanography. Japan also will make extensive distributional investigations, plus oceanographic and racial studies. In tagging and scale analysis in particular the Japanese are expected to apply methods discussed by the researchers during the Seattle meetings.

Broadly, the commission's research program will follow the lines laid down at Tokyo in 1955, but with shifts in emphasis to the projects appearing to bear the greatest promise.

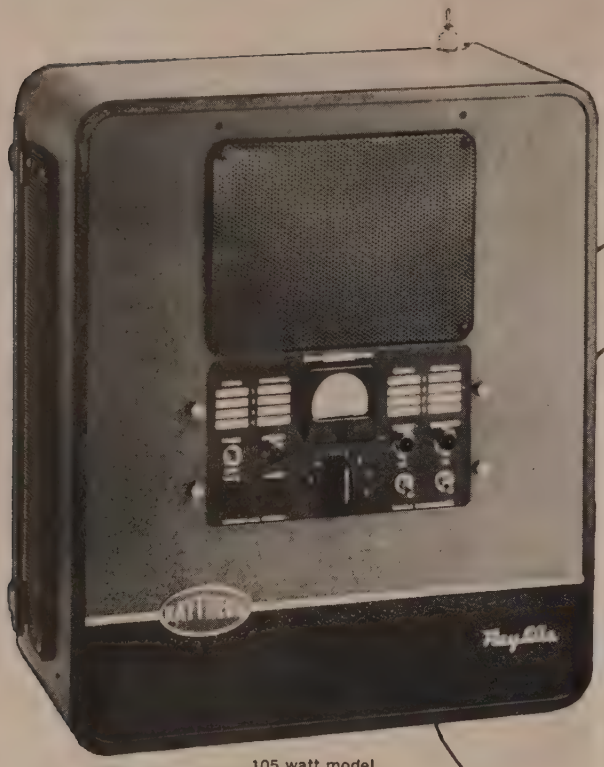
The American section's studies in distribution, racial studies, seriology, biometrics, associated organisms and King crab will be conducted by the Fish and Wildlife Service under the overall supervision of Dr. L. A. Walford from Washington, with C. E. Atkinson, chief of Pacific Salmon investigations directly in charge.

Tagging will again be contracted to the Fisheries Research Institute of the University of Washington under Dr. W. F. Thompson, director; while the oceanographic work done will be contracted to the university's Department of Oceanography under Dr. R. H. Fleming.

Canadian Section—In the front row, Commissioners James Cameron, R. T. Hager, George R. Clark, J. M. Buchanan. In the rear row, Dr. R. E. Foerster, Dr. K. S. Ketchen, Dr. M. P. Shepard, Dr. A. W. H. Needler, Consul-General C. N. Senior.

A FISHING VESSEL

AND A RAYTHEON RADIOTELEPHONE



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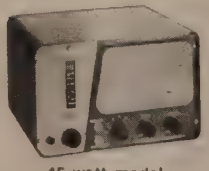

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West, Further West

● Principal shift in emphasis of American research is expected to be in carrying the tagging operations well to the west of the area worked in 1956; and also further south, if that proves possible within the limitations of time and finance.

It is planned to put a third tagging vessel to sea; and to initiate work as early in the spring as possible because of the desirability of tagging as many fish as possible in advance of the high seas fishing season.

Canadian oceanographers also are specially interested in mid-winter surveys to supplement the summer cruises which have been the principal source of this data in the past. It is felt also that oceanographic studies in the future should be concentrated to a greater extent in "the central portions which are of special interest to the protocol problem (distinguishing between stocks)".

Japanese Fishing

● Although the matter was never a subject of official discussion, the extent and location of Japanese commercial fishing operations in 1956—and the plans for 1957—were matters of prime interest during the INPAC meeting.

Available data indicated that the Japanese fished almost five times as much gear in 1956 in waters between the U.S.S.R. Quota Line and 175° West Longitude as they did in the preceding season.

Further, it appears that their catch from these waters adjacent to the Abstention Area in 1956 was about three times as great as that taken in this same segment of the area in 1955.

American opinion recognized that the Japanese were strictly within their treaty position in this intensification of fishing pressure in boundary waters, but was inclined to feel that the move was short-sighted, in that it might adversely affect the markets for Japanese salmon which have been developing rapidly in Canada and the United States.

Pressed for an expression of opinion as to the probable scope, location and intensity of Japan's fishing operations outside the Soviet Quota Line in 1957, spokesmen for that country declared they were not as yet in any position to venture a forecast. They indicated, however, that they were aware of the serious concern with which any easterly drift of their mid-ocean fishery is viewed in North America.

Edward W. Allen, chairman of the International North Pacific Fisheries Commission, shakes hands at the opening session with the three section chairmen. M. E. Brooding, American, is in the rear; then George R. Clark of Canada, who was elected commission chairman at the Seattle meeting; and Iwao Fujita of Japan, who was elected vice chairman of the commission.—Seattle Post-Intelligencer photo.

Smooth Seas

● INPAC's fourth meeting entered smooth sailing on the seas of international relationships. This was apparent throughout. As virtually all members of the national sections were well acquainted, there was tendency toward trust and confidence one with the other beyond that manifest at previous meetings. Points of differences were few—and never thorny.

Some observers saw in the situation evidence that the treatment which Japan received in fishery matters at the hands of the Soviet Union last spring and summer had made the North Pacific Fisheries Treaty definitely more attractive to her. Presence of the U.S.S.R. observers at the Seattle meeting may have contributed to the evident rapport between the Japanese and their treaty partners.

In any case, the three national sections moved with good speed and in good humor to an examination of the year's progress, planning the researches for the coming twelve months, and acceptance of the Cases for Abstention submitted by the United States and Canada.

Now the Cases for Abstention are added to the commission's problem of determining "if there are areas in which salmon originating in the rivers of Canada and the United States inter-

Thoughtful Alaskans—Studying a point during the Biological and Research sessions preceding the International North Pacific Fisheries meeting. From the left: C. L. Anderson, director, Alaska Territorial Department of Fisheries; Larry Fitzpatrick, Ketchikan; Robert C. Kallenberg, Dillingham. On the right, and more relaxed, Lowell Wakefield, Seattle King crab operator.

AMERICAN ADVISERS—From the left, around the table—Richard S. Croker, James Waugh, W. C. Arnold, Thomas F. Sandoz, Lowell Wakefield, Lawrence Fitzpatrick, Robert C. Kallenberg, Robert J. Schoettler, Milton C. James, Clarence L. Anderson, Harold E. Lokken. Advisory committee members attending the conference, but not in the picture, were Montgomery Phister, C. K. Phenicie, George Johansen, DeWitt Gilbert.

mingle with salmon originating in the rivers of Asia" . . . and the "line or lines which best divide salmon of Asian origin" from salmon of North American origin. Thus the commission's current responsibilities increase.

Soviet Observers

● U.S.S.R. was represented at the Seattle meeting by Dr. K. I. Panin and Dr. R. S. Semko. They were accompanied to Seattle by Dr. Victor Loosanoff of the United States Fish and Wildlife Service, who acted as their guide and interpreter.

While the role of the Russians was as observers only, Dr. Panin spoke before an informal meeting of the commission's Committee on Biology and Research, in a talk which reviewed the fishery administration and research of the Soviet Union in the Far East. The methods he described proved to be very similar in most respects to those employed by the researchers of the United States, Canada and Japan; and it was interesting that he was closely abreast of developments in the eastern Pacific, admittedly through his subscription to *Pacific Fisherman*.

He was particularly interested in further development of scale readings and the wider application of this technique to age determination of the salmon in the runs. While his talk was strictly of a non-political nature, and did not in any way attack Japan, at this point it took on a slightly critical tone.

"We need to predict the run, and to do this we need to know more facts as to age classes of salmon taken, which is of great importance. We regret that the Japanese in their fishing on the high seas near Kamchatka do not pay sufficient attention to the age classes of the salmon they catch.

"This obviously is a defect, and one which we hope in the near future will be eliminated. Unless we abolish this defect it will be impossible to rationalize the salmon fisheries.

"We note that INPAC carries on large and serious activities to develop the basic principle of rational fishery; and we can see that good progress is being made to develop a scientific approach to the handling of the fishery resources of the North Pacific. We believe these steps should be given great support; and that closer cooperation of the governments interested in the North Pacific on a basis of broad science will produce even greater results".

Some of Dr. Panin's hearers interpreted his closing sentences as a veiled bid for further invitations.

Interest also attached to his frequent use of the term "rational fishery". Not once did he speak of "conservation", but always of "rational utilization of the fishery stock".

In addition to the traditional receptions sponsored by the three national sections composing the commission, the Association of Pacific Fisheries provided an elaborate reception and buffet dinner at the Washington Athletic Club, Seattle. This was attended by approximately 500 persons, including the principals of the American salmon industry in all its levels, fishermen, vessel owners, operators and marketers, beside many from the halibut, herring, tuna and King crab businesses, as well of course as the 60-odd active participants in the international meeting itself.

Harold E. Lokken was chairman of the American industry's entertainment committee, with E. E. Murray, president of the Association of Pacific Fisheries, active in the arrangements for the large reception and dinner.

These Were There

● Official attendance at the Seattle meeting of the International North Pacific Fisheries Commission included:

Canada—

John M. Buchanan, James Cameron, George R. Clark, Roger T. Hager, commissioners.

A. W. H. Needler, R. E. Foerster, J. L. Kask, A. J. Whitmore, C. N. Senior, M. P. Shepard, K. S. Ketchen, Ferris Neave, J. I. Manzer, L. Margolis, J. P. Tully, A. J. Dodimead, D. Foskett, R. Le Brasseur and H. B. Hachey, advisors.

Japan—

Iwao Fujita, Koh Chiba, Sakari Masuda, Kenkichi Nakabe, commissioners;

S. Mizota, interpreter;

M. Fujinaga, S. Yoskikawa, J. Inagawa, K. Kawakami, H. Ohki, G. Yamada, K. Taguchi and H. Tominaga, advisers and experts.

United States—

Milton E. Brooding, Edward W. Allen, John H. Clawson and John L. Farley, commissioners;

C. L. Anderson, W. C. Arnold, R. S. Croker, Lawrence Fitzpatrick, DeWitt Gilbert, Milton C. James, George Johansen, Robert C. Kallenberg, H. E. Lokken, C. K. Phenicie, Montgomery Phister, Thomas F. Sandoz, Robert J. Schoettler, Lowell Wakefield and James Waugh, advisory committee;

C. E. Atkinson, W. C. Herrington, Donald P. Loker, A. J. Suomela, W. M. Terry, W. F. Thompson and L. A. Walford, advisors.

Secretariat—

Roy I. Jackson, executive director; Hiroshi Kasahara, assistant executive director and interpreter.

Tuna Output Runs Ahead Despite Easy Fall Pace

Although tuna production for October was down, the year's overall production to date is greater than for a similar period in 1955, and for the first time in many months, San Diego in October took delivery of more tuna than did the Terminal Island area. This was due largely to the fact that during most of the month only one Van Camp cannery at Terminal Island was operating, and Plant Four, Star-Kist's big cannery, was closed down for overhaul.

Therefore, as far as Yellowfin is concerned, Terminal Island received approximately 1,753 tons of Yellowfin, 1,203 tons of Skipjack, 260 tons of Bluefin, 831 tons of Albacore and 2 tons of yellowtail, a total of 4,054, and a case pack of 185,993.

San Diego canneries took delivery of 2,793 tons of Yellowfin, 3,048 of Skipjack, 75 Bluefin, 1,422 of Albacore, one ton of bonito and 9 of yellowtail; with a total of 7,348, resulting in a case pack of 358,812.

Total case pack for Southern California for October, approximate figures, 544,805, as compared to 802,250 for September.

From Japan, during October, came to Terminal Island 1,308 tons of Yellowfin; and from South America, 198 tons of Yellowfin and 696 tons of Skipjack.

Combined totals, San Pedro and San Diego, on Yellowfin and Skipjack, show that Yellowfin led Skipjack by a slight margin. And, also, during October Albacore fishing production was still holding up, with a combined tonnage of 2,253.

How Good Will Bristol Bay Be Next Season?

• Guarded optimism characterizes the Alaska fish administration's forecast for the Bristol Bay run of 1957.

Even under such restraint the outlook was classed as "good", with the further admission that it *might* turn out to be *"real* good".

Speaking at the Seattle hearing on 1957 regulations, Donald L. McKernan, administrator, and Dr. William F. Royce, chief biologist, forecast for the Naknek-Kvichak system a catch on the order of 7 million fish out of a 14-million run.

For the Egegik, Ugashik and Nushagak, they foresaw "fairly good" fishing. For the Bay as a whole: a better run in 1957 than in 1956.

• The "iffy" aspect of the 1957 forecast hangs on the astonishing proportion of 4-year-old Reds in the 1956 run. This *percentage* of 4-year fish exceeded that of any other year on record.

If the number of fours in 1956 is accepted as an index of 5-year fish to be expected in 1957 according to the normal percentage relationship between these two classes in the run, then the outlook for 1957 approaches the fantastic.

On the other hand, Dr. Royce is of the opinion that the high percentage of 4-year fish in the good Naknek-Kvichak run of 1956 represents an aberrant condition and cannot be counted upon too strongly in preparations for 1957.

• Although there were only 300 boats fishing in the Naknek-Kvichak area in 1956, the catch per boat equalled the highest levels ever recorded, being on the order of 30,000 fish.

Escapements generally were good, except for the Nushagak, where the run as a whole was disappointing.

No changes of substantial importance are expected for Bristol Bay next season. The table of gear-versus-fishing time, inaugurated last year, is rated adequate for 1957, except that some minor modification in number of units of gear may be made. This may result from the studies of gear efficiency under the different types of operations which have been developing.

• Industry Opinion

Alaska Fishermen's Union, speaking through George Johansen, and the Bristol Bay operators with J. S. Wilkinson as spokesman, both recommended strongly that individual drift net fishermen be limited to 75 fathoms of net; and that not more than 150 fathoms be operated from any one boat. The packers also asked that an individual be permitted to register for only one form of gear; and that only the licensee be permitted to fish that gear.

The "no-man's land" between the Naknek-Kvichak and the Egegik districts came in for sharp attack from both fishermen and packers, who contended that it serves no sound conservation purpose but, on the other hand, tends to result in destructively intense concentration of gear.

Fisherman opinion for Southeast Alaska was voiced at Seattle by Harry Longworth, Mrs. Diane Olson, Arthur Ericksen, Arne Linden, William Fraser, Everett Hydson. Among their points:

Eliminate traps; liberalize the fall Chum season; permit power blocks; allow no sport fishery preserves; limit herring to use for food; longer season in the South Wales district; commendation for the Alaska fishery administration, and specifically for Mr. McKernan; oppose gillnetting on Portland Canal; two-man stream guards; oppose area licensing; favor area licensing.

• Prince William Sound

"We have started toward recovery, but we still have far to go", Dr. William F. Royce, chief of Alaska fishery research, told the Seattle hearing on 1957 regulations. The 1956 run produced the best *even year* pack since 1946.

The forecast for 1957, based on the limited 1955 escapement, which was only half that of 1956, indicates a run of between 1.5 and 4.0 Pinks, with a probable mean around 3.0 million.

The Service feels this outlook requires continuation of drastic restrictions. It is proposed to close larger areas at the mouth of many streams, and to seek voluntary closure of half the trap effort, in order to permit a month of fishing. The matter is still in study, however, and the 1956 program may be continued another year.

C. F. Johnson, speaking for the Prince William Sound packers, said they did not feel there was any economic justification for 1957 operations if the run was not expected to exceed 3 million fish. They felt strongly that the season should run to August 10, and would seek to make the necessary trap gear reduction to justify such a terminal date.

He declared illegal fishing on Prince William Sound presents a critical problem.

Foreign Affairs, Quality, Research, Market Growth, Grist for C.F.C.A.

● The California Fish Canners Association, at its annual two-day meeting at Ojai Valley Inn, Nov. 14-15, elected Harold P. Requa, Jr. director of sales, Westgate - California Tuna Packing Co., San Diego as president for the coming year, succeeding William C. Morehead, Pan-Pacific Fisheries, Inc., Terminal Island.

Joseph M. Mardesich, head of Franco-Italian Packing Co., was chosen vice president; Gilbert C. Van Camp Jr., Van Camp Sea Food Co. Inc., is the new secretary-treasurer. Kenneth J. Berglund, the 1956 vice president and slated for the presidency, was present but retired by reason of having resigned as executive vice president of Westgate-California, and having left the industry. Charles R. Carry, executive director, CFCA, and Ed L. Morris, director of Tuna Research Foundation, were continued in their positions.

The seventh renewal of the Miller Freeman perpetual golf trophy was won for the third time by Nick F. Trutanic, vice president, Star - Kist Foods Inc. He won in 1950 and 1953 also. In the '56 competition over the tough Ojai Valley Inn course, he had 70 low net.

Some 70 members and guests attended the affair, which for the first time was held in November instead of the traditional mid-September. As customary, American and Continental Can Companies entertained at the two cocktail parties and dinners. Vice President H. M. Blinn of Continental Can and R. C. Stolk, vice president, American Can, were official hosts for these affairs.

The annual president's report, outlining association activities during the past year, was concerned with legislation, research, tuna standards, promotion and public relations.

At the state level, there was a continuing program to improve relations with the California legislature and its members.

Important was a continuing educational program to acquaint the legislature with problems of the commercial fishing industry and the so-called sport vs. commercial fisheries conflict.

In the Federal field the association was continually alert to encourage legislation beneficial to the industry, and officers kept in close touch with all Federal activities affecting the fisheries.

In its continuing program of product promotion and public relations, the president reported the records indicate the greatest amount of favorable publicity since the program was begun four years or so ago. A decorated boat sponsored by CFCA at the Fishermen's Fiesta, San Pedro, won first prize.

Tie-ins were made with Wesson Oil for a Lenten program; the association had a display booth at this year's convention of National Association of retail grocers; the booklet "Tuna, A Saga of the Sea" was revised and 100,000 copies reprinted; a '57 Lenten promotion is arranged with Carnation Milk and negotiations are in process for promotions with Coca Cola and Lipton Tea for next year.

Most important of all has been an 22" x 15" sheet available in multicolor to home economics directors, school teachers etc. Thousands of requests have been received for this promotion, entitled, "Nutritional Value of Canned Tuna for Teen-Agers."

On research the association collaborated with the U.S. Fish and Wildlife service, in carrying out raw fish quality projects; close touch was maintained with such research agencies as the Inter-American Tropical Tuna commission, Pacific Oceanic Fishery Investigation.

All Southern California tuna canners signed the application for promulgation of Federal Standards of Identity and Fill of Container for canned tuna. This application is now in the hands of FADA, which organization shortly will publish a tentative proposed standard.

Finally, on international affairs, President Morehead stated the principal problem concerns the efforts of some Latin countries to extend their claims to territorial waters to a distance of 200 miles to sea. Executive Director Carry spent more than a month in Santiago, Chile, recently. Subsequently he attended meetings in Miami, Washington, D.C., and San Francisco on the same subject. As a result it is believed, the president said, the situation is reasonably well in hand.

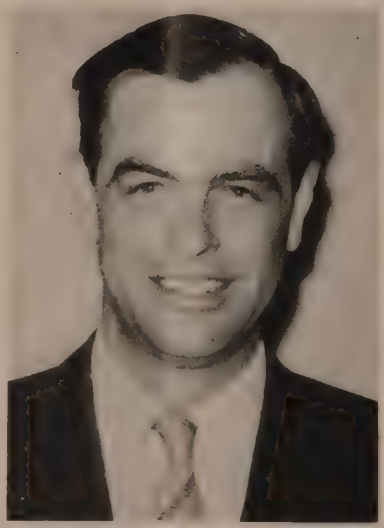
C. K. Phenicie Coordinates Tri-State Researches

The appointment of Charles K. Phenicie of Montana as research coordinator for the Pacific Marine Fisheries Commission was announced in November by Robert J. Schoettler, commission chairman.

Mr. Phenicie's duties as PMFC coordinator will include planning of all marine fisheries research conducted jointly by California, Oregon, and Washington under an interstate compact established in 1948. He succeeds M. C. Jones who resigned the position in August to become Oregon state fisheries director.

Phenicie has had broad experience in both marine and fresh water fisheries research. He currently is chief fisheries management biologist for the Montana Department of Fish and Game and has been with that agency since 1947. Prior to 1947 he was employed by the Washington Department of Fisheries in otter trawl and herring investigations.

The new research coordinator is a



C. K. Phenicie, new coordinator of research for the Pacific Marine Fisheries Commission, will have his headquarters in Portland.

1944 graduate of the University of Washington school of fisheries. In addition, Phenicie undertook 1½ years of graduate studies at the U. of W. following World War II.

PACIFIC Fisherman's NEWS

DECEMBER 1956

Sardine Fishing Drops Sharply In November Dark

Productivity of the sardine fishery dropped-off considerably during the end of the November dark, although on October 22, about 25 purse seiners made productive sets. The night of November 11 gave the net boats good sets of mackerel, at a time when sardine were scarce. It appears that the sardines are on their way south, perhaps a little earlier this year than before, and they are of the 1953-year class.

Canners, as this issue went to press, had limits on mackerel at 20-tons. Van Camp, which in late October offered $52.50 for sardines, returned in early November to the $47.50 price. On November 13 an estimated tonnage of 50 only was delivered to the San Pedro area.

Through the sardine season, for October-end, 19,760 tons had been delivered, with a case pack for that month of 474,187. Mackerel did not fare so well—only 6,069 tons and 102,898 cases; anchovies, 701 tons and 19,710 cases. And there was some squid delivered: 8¾ tons, 393 cases.

Electrical Engineer Named To Calif. Commission

A San Diego electrical engineer has been appointed to succeed the late Harley Knox as a member of the California State Fish and Game Commission. The appointment of William P. Elser was made by Governor Knight.

Seek Quality Seed

- Quality of seed.
- Distribution of escapement both as to timing and tributaries.
- Control of intensity to achieve these ends, and also to permit operations over an economically practical period.
- These are three prime points in the present approach to Federal fishery management in Alaska, as developed in the course of the hearings on the 1957 regulatory proposals.

With their new emphasis on selective escapement to secure spawning from the most productive elements of the run, and distributed through all spawning areas of a stream system, the proposals adhere to a new philosophy of management.

It adheres to the new, aggressive philosophy of fishery biology and abandons the old defeatist thinking which characterized the Alaska management policies for so long.

- Arnie J. Suomela, director of the Bureau of Commercial Fisheries, emphasized these things in opening the Seattle hearing:

"Some say that the fisheries of Alaska are doomed; but they are wrong. The fisheries will continue to bring new wealth to Alaska through reliance on scientific fact. We are

(Continued to page 19)

Late Bluefin Run Pops Up

In early November there was an unseasonal run of Bluefin in Southern California waters, but Yellowfin and Skipjack fishing for both purse seiners and tuna clippers was slow on the high seas off Mexico, Central and South America.

The Bluefin, and some Albacore, were taken near Catalina Island, with some schools near the Coronado Islands, south of the border.

In the first few days of November no bait boats were unloaded at San Pedro, and only one purse seiner; however at San Diego seven clippers delivered tuna.

As of November 3, Yellowfin was leading in tonnage of domestic-caught tuna delivered to Southern California, with Skipjack second. Albacore tonnage delivered to Southern California exceeded that for a similar period in 1955.

San Pedro Unions Argue

An examiner of the National Labor Relations Board heard in November the fishermen's union branch of the International Longshoremen's and Warehousemen's Union claim it should be designated bargaining agent for all San Pedro fishing boats.

The ILMU is asking for an election that would designate which union would be the sole bargaining agent.

It is reported that the Seine and Line Fishermen's Union (AFL) has men on about 75 boats; and that the ILWU has men on 35 boats.

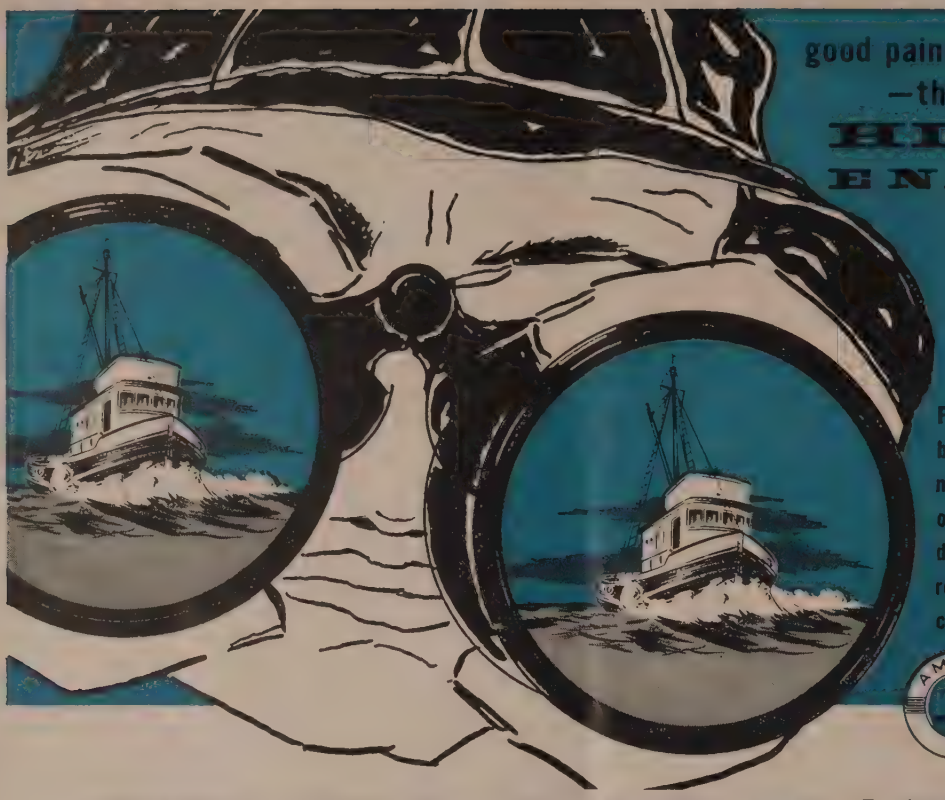
Clipper "Hornet" Sinks Off South America

Another bait boat was lost to the sea, as this issue of *Pacific Fisherman* went to press: the *Hornet*, a YP converted at Harbor Boat Building Company. The boat sank off the coast of Peru, with Richard N. Virissimo as fish captain, and Ross Miller, licensed navigator, as the vessel's skipper.

Virissimo reported that the crew was taken aboard the *Sun Europa*. The vessel's managing owner at last report was Alvaro Roland Virissimo, and when the vessel sank she was believed to have had a full load of tuna aboard. The *Hornet* had left San Diego early in September.

"Glacier Bay" Missing

The fishboat *Glacier Bay*, which left San Pedro in mid-September, is still reported missing as this issue of PF went to press. The Coast Guard has been conducting an extensive search off Baja California, where the boat was fishing Albacore and other tuna.



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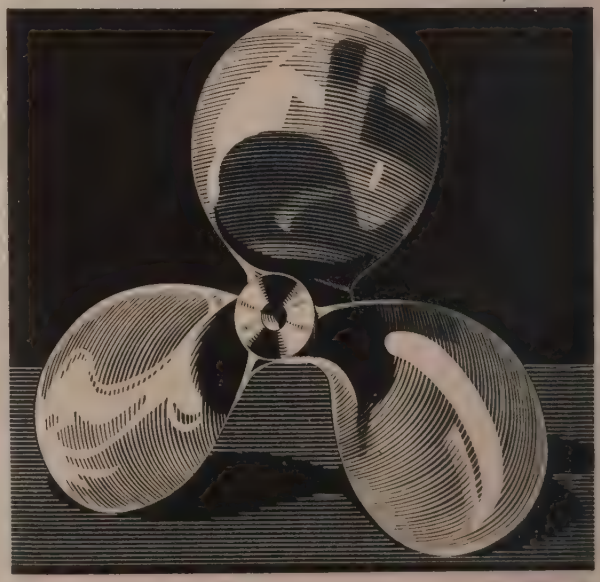

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Start Fishways to Erase Sockeye Block at Yale

The International Pacific Salmon Fisheries Commission in mid-November started construction of fishways on the Fraser River near Yale at the site of the obstruction which was discovered in 1955 during the passage of the Early Stuart and Bowron River Sockeye runs. Two structures are planned for the west bank of the river at a point three miles upstream from Yale. One will be a formal concrete fishway 88′ long of the Hell's Gate type and the other will be a baffled shallow cut 80′ long through a bedrock ledge. The total cost of the fishways is estimated to be $45,000 and will be shared equally by the governments of Canada and the United States.

The two points of obstruction, in one of the most rugged sections of the Fraser River canyon, were discovered early in July, 1955, at a time when river levels were unusually high due to a delayed runoff in the Fraser River. It was found that the Sockeye runs migrating up river at that time were blocked or seriously delayed for an 11 day period during which river levels ranged between gauge 70 and 74 at Hell's Gate, 15 miles upstream. Only 2170 Sockeye survived to reach the spawning grounds on the Stuart River system out of an expected escapement of 30,000 to 50,000 fish and the Bowron River escapement was only about one-half the size expected. It is estimated that the 1955 block at Yale will result in a loss of $400,000 to the industry on that cycle year before the affected runs can be reestablished.

Examination of records of river runoff and Sockeye escapements has shown that a similar blockade occurred at Yale in 1933, the cycle year of the dominant Early Stuart run and that blockades of lesser proportions have occurred in five other years.

The Early Stuart Sockeye run is an extremely valuable segment of the Fraser River Sockeye fishery. In 1953 the dominant cycle year, the run contained approximately 1,000,000 fish and the commercial catch from the run was valued at about $2,500,000 at present wholesale prices. There is good prospect that the size of this run may be exceeded in future cycle years. If the blockade at Yale occurred during the migration of this large dominant year run it is estimated that a loss of at least $2,500,000 to the fishing industry would result before the run could be reestablished. It is in order to prevent such an occurrence that the Commission is rushing construction of the two fishways at Yale for completion by May, 1957.

Seek Quality Seed

(Continued from page 17)

on the rise today, for *the* 1956 *seeding was the best of any in recent years.*

"Nevertheless, we still have many problems. All of our species have been overharvested. We still suffer from the consequences of the excessive demands put upon the fisheries in time of war.

"This we seek to do:

"To increase escapement.

"To improve its quality—*which is of even greater importance.*

"Closures and area licensing have produced stability of effort, and have made it possible to secure escapement from the most productive segments of the run and to distribute the seeding over all spawning areas.

"The general picture is bright, and we foresee a sustained yield on the order of 5 million cases annually within a few years".

• Area Licensing

The Alaska fishery management team left no doubt about the future of area licensing. It's here to stay; for they feel that even in its initial season the effect was beneficial. Moreover, it will be extended; but perhaps not to divisions of Southeast Alaska this season.

Donald L. McKernan, Alaska fishery administrator, made it plain that the Service has not actually "abandoned" the idea of area licensing in Southeast Alaska, as many had believed. It is still under study, although the proposal may be suspended for 1957.

Area licensing appears to have more friends in Alaska than among the fishermen from the Outside. The Seattle hearing brought out a good deal of criticism of the method, generally as an invasion of the rights of fishermen, and not because of any lack of success as a conservation measure.

• Southeast Alaska

Principal proposals for this area will extend the present trap and seine limitations, with the 60-hour weekly closure. This was considered necessary because the severe winter of 1955-56 impaired freshwater survival.

Closure of winter trolling in Southeast Alaska from Nov. 1 to April 15 is proposed.

This troll closure brought sharply differing views from trollers themselves. Some favored it; some did not.

Here Are Four Boats Lost or Strayed

Esther B, built in Torrance in 1948, is listed as out of documentation . . . owner Robert W. Bailey.

Genevieve H, built in Tacoma in 1927, which foundered is also listed "out of documentation". Her owner was George Kell. Also listed as foundered is the tuna clipper, *Sun Dial,* owned by Wm. G. McHenry, home port, San Diego.

And the *Sea Bear,* owned by Bud Reinders, has been transferred to the Mexican flag from her home port of Los Angeles.

SAVES $412 A SEASON

Since he switched to GM Detroit Diesel Power

More work on less fuel. That's a one-two combination that spells more profitable fishing for anyone. And that's exactly what Seattle's Emil Vienola got when he switched his "ARGUS" from gasoline to General Motors Detroit Diesel power.

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Troller "ARGUS" of Seattle, Washington, powered by a GM "4-51" Detroit Diesel.

How Daring Wins Support In Cockpit of Controversy

• Biological experiment on a grand scale is proposed for Cook Inlet this year, with the industry backing the Alaska fishery administration wholeheartedly.

Thus support is as notable as the management experiment itself, for Cook Inlet is the cockpit of controversy.

• "Well distributed escapement, with each part of each tributary moderately seeded, is our prescription for Cook Inlet", Dr. William F. Royce, chief of the research section of the Alaska fisheries administration, told the Seattle hearing on 1957 regulations.

"Escapement on the Inlet has been relatively constant since 1952, when gear was drastically reduced; but we can detect no build-up to indicate *improvement.* We believe this is due to failure to get distribution of seed —something very difficult to detect or prove under the muddy water conditions prevalent in the Inlet tributaries".

Donald L. McKernan, Alaska administrator, explained the method proposed:

"We are not trying to reduce fishing *effort,* or to reduce the actual *catch;*

"But we want to *distribute* the escapement better.

"This we propose to do by *reducing the units* of gear; and by *extending the season*".

• Scientific Testing

Industry acceptance of this scientific testing of the principle of distributed escapement was evident, and particularly astonishing in view of the wide divergence of opinion and inter-gear bitterness which has prevailed in the Cook Inlet area.

Moreover, the plan calls for very real limitation upon gear, thus:

1. *Drift gear* fishing week will be limited according to the number of units of gear registered for fishing, after the manner of regulation applied on Bristol Bay last season.

2. *Fixed gear* will be reduced by one-third. Traps will be reduced in number on the basis of their average catch in previous years to produce an over-all curtailment of one-third in productive capacity. Set nets will be curtailed by cutting the length of net, or by increasing the spacing between them. Decision on the method is still under study.

With this one-third overall reduction in effect, the Cook Inlet fishing week would be extended to three days, divided into two 36-hour periods.

• Problems

Among the Cook Inlet problems as yet unresolved are:

1. That resulting from the registration of boats, which are not actually fished. This tends to reduce the drifters' week to the benefit of fixed gear.

2. Whether under an area licensing regime it is proper for one individual to fish more than one form of gear, as in the case of a setnetter who also runs a gillnet.

• Kodiak Prospects

The Service believes that the 1957 Pink run to the Kodiak Island Area will be *good,* but perhaps not quite equal to that of 1955. It is expected to peak about August 7.

In line with the administration's effort to secure a *well-distributed* escapement, rather than mere volume, the mid-season closure will be eliminated this year, but with a day added to the weekly closure, which thus will become 60 hours.

• Karluk Correction

Drastic measures are being adopted by the Service in an effort to rebuild the vanishing resource at Karluk. The 1956 Red run to this once great fishery was the poorest in history, but in spite of this fact Mr. McKernan said it was believed that a fair escapement had been secured from the weak mid-section of the run.

Convinced that the Karluk depletion results largely from a lowering of productivity, the Service is seeking in future to take the escapement from what was formerly the productive mid-run, and to this end will close fishing for 10 days, from July 19 to 29.

In addition to seeking the productive mid-run fish for seeding, the Service is concentrating on a study of the predator problem, and of the possibilities offered by stream improvement work in the Karluk area.

Conditions at Alitak are also considered critical and severe limitations —not yet decided upon—will be imposed on the fishery of the inner area.

• Industry Reaction

Operator reaction to the Service proposals for Kodiak, as presented by Eric Bulmer, favored the 60-hour weekly closure, as a temporary measure only; approved the Karluk mid-season closure *in off years only;* objected to proposed increase in closed area; felt the fall season should not be opened until all Pinks have definitely moved out of the fishing areas.

Fisherman opinion was voiced by Nick Pedrish, George Bowman and Joe Suryan. They attacked area licensing, transfer of fish between areas by tenders, and small jitney seiners. On the other hand, they favored limiting fishermen to one form of gear only; 75-fathom seine leads.

• Area Licensing Angles

The theory that area licensing should apply to the handling of fish after they are caught as well as to the boats catching them cropped-up frequently in the hearings on regulations.

This point was one of two consistently advanced by fishermen who oppose the present program which restricts a fishing vessel to a single area. The other point was that, if it is fair to limit a fisherman to one area, he should also be limited to one form of gear and should not be permitted to operate two types within that area.

Electronic Equipment Goes Into Nine Fishing Boats

Evans Radio Dock, Oakland, has installed loran sets on the *Paul C.,* Wadsworth brothers, Oakland; *Wanderon,* Dana Slater; *Irene,* Gus Wandtke, Sausalito; *Gypsy,* J. E. McCarthy, Sunnyvale; *Ella,* John Downs, Eureka; *Ceaac,* Doc Rosenthal, Oakland; and *Kanoa Grande,* Jim Stillman.

Evans Radio Dock has been appointed a Raytheon dealer according to Mr. and Mrs. George Evans, and they also sell the Ross and Kaar marine electronics devices. A new Kaar DF was installed on Freckles Vella's boat *Chief; Tarantino Jr.,* Noyo Harbor, A. Tarantino; and *Wiki Wiki,* Lloyd Smith, Oakland.

In anticipation of next year's Albacore season Evans Radio Dock is installing a new fish hoist for unloading fish boats, a new ice hoist, and is putting in a new heavy duty pump for washing down the decks and holds of fishing boats.

"Well pleased with performance of NORDBERG *MARLIN* in my 31′ Gillnetter" says Even Eide, Stanwood, Wash.

Another satisfied Nordberg owner heads out to the salmon grounds of Puget Sound . . . it's Even Eide of Stanwood, Washington, at the wheel of his new 31′ V-bottom gillnetter, *ROAMER III*. Designed by Edwin Monk and built by the Northwest Boat Shop, Everett, Washington, *ROAMER III* is powered by a 110 hp Nordberg *MARLIN*.

Mr. Eide's simple statement, "I'm well pleased with the performance of my Nordberg Marlin," speaks well for the smooth, dependable power this engine delivers even under the most rugged operating conditions. Here's steady, day after day, top-notch performance with minimum maintenance . . . the kind that adds a big plus to your fishing profits.

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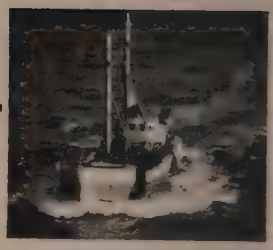

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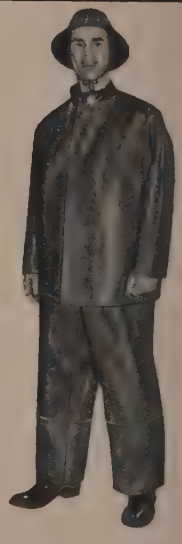

U. S. Ruff-N-Tuff Eureka Suit
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Storm King Boots • tempered rubber • reinforced toe • deep-cleated outsole

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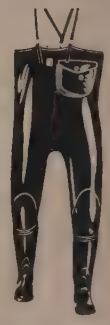

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SCOPE and SOUNDER

Monthly digest of present-day pioneering methods and equipment in world fisheries.

By PETRALE

Peeling Machine Launches Grays Harbor Shrimping

• Shrimp operations on Grays Harbor, Wash., were inaugurated in November by the Kaakinen Fish Co., handling the catch of the trawler *Royal* taken on the banks a few miles off the Gray's Harbor entrance.

Thus commercial exploitation of the shrimp resource began almost exactly one year after the federal fishery exploratory vessel *John N. Cobb* proved the existence of a large population of shrimp on the Grays Harbor Bank.

Cooperating with Ed Kaakinen in arranging for the installation of a Peelers shrimp machine in the Kaakinen plant at Westport, Wash., is Ivar Wendt, Seattle fish products merchandiser, who has developed an extensive market for tiny pink Pacific shrimp flash frozen in brine in lithographed tins bearing his Pacific Pearl brand. Supplies of these shrimp hitherto have come largely from British Columbia, and Mr. Wendt is interested in developing a domestic source as well.

The Peelers machine is manufactured by The Peelers Co. in New Orleans, and is the first automatic shrimp peeling machine to be installed on the Pacific Coast of the United States. There is one other working in the Mexican shrimp fishery of Lower California.

The Kaakinen machine, which costs about $35,000 and is furnished on lease, is No. 95 of the Peeler line and was erected by Steve Pool of New Orleans.

The machine proved itself able to handle 800 lbs. of the tiny Pacific pink shrimp per hour, turning out picked and peeled shrimp meat at the rate of about 150 lbs. an hour. Workmanship of the machine is claimed 99% of par.

Initial shrimp supply for the Kaakinen plant comes from the 48' dragger *Royal,* owned and operated by Frank Horne of Hoquiam.

Successful fishing for Pacific shrimp has been carried on out of Morro Bay and Humboldt Bay, Calif., for a couple of years or more. However, the industry has not developed beyond local requirements because of the high labor cost involved in preparing the shrimp meat by hand methods.

A year or more ago fishermen working out of Tillamook Bay, Oregon, were successful in taking large quantities of shrimp, but not in developing an economic outlet for them. After a few trips the venture was suspended because of the labor cost involved in preparation.

This fact, plus the large population

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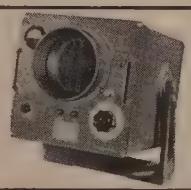
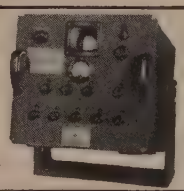
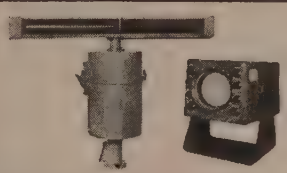


EDO LORAN Compact, direct-reading aid to long-range navigation. No special training required to operate. Fix obtained from single, 28-tube unit in matter of seconds, regardless of weather or sea conditions. Absolutely accurate though relatively low in cost.



EDO RADAR For long and short-range navigation in any weather. CRT display gives clear picture on 1, 2, 5, 10 and 20-mile range. Patented slotted waveguide antenna, mounted on transmitter, assures superior definition. Ideal where space and generator capacity are limited.



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The new 65-foot *Palomar*, flagship of Oceanside's 9-boat fleet, is powered with left and right GMC 671 diesels.

Buster Kolb, secretary; Ray McCullah, president; Ludie Britsch, vice president of Oceanside Sport Fishing, Inc., Oceanside, Calif.

"T5X...remarkable performance in marine diesels"

"Although my experience with Union's T5X Motor Oil dates back to 1946, I'm continually amazed with its remarkable performance in marine diesels," writes Ray McCullah, president of Oceanside Sport Fishing.

"To cite examples—the 2400 'Cat' which powers our 65-foot sportfisher, *Oceanside*, has not yet required an overhaul after more than 15,000 hours. And when we overhauled the 'Jimmie' in our 48-foot *R-Zee* the bearings looked like new after seven seasons of six months each, seven days a week...*not one single pit.*

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The performance of T5X Motor Oil is, as Capt. McCullah says, truly *amazing*. It's rapidly becoming the all-time favorite of top fleet operators on the Pacific, Gulf and Atlantic coasts. Try T5X in your own engines and you'll see why.

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proven so close to Grays Harbor, led Mr. Kaakinen and Mr. Wendt to undertake a venture based on the Peelers machine.

Salmon Mortality High After Fish Are Hooked

Two Canadian scientists, D. J. Milne and E. A. Ball, have found that the mortality involved in catching and releasing small Spring or Chinook salmon and Coho or Silver salmon when caught with commercial troll gear may be relatively high. The experimenters used the Fisheries Research boat *Alta* for trolling and capturing fish in the vicinity of Nanaimo, B.C. The fish, caught with both barbed and barbless hooks, ranged from 8" to 24" in length. The fish captured were tagged or marked in various methods and then placed in live tanks aboard the vessel. The live tanks were equipped with a continuous supply of fresh sea water. The fish were kept in the live tanks from one to six hours during the day's fishing operations. At the end of this time, they were transferred to a large floating wire mesh sound anchored in Departure Bay. Fish which had been hooked in the gills all died and about half those hooked in the eye died. Of those which had been hooked in the jaw only 25% died. In all cases, the mortality occurred early in the first day and appeared to have resulted from hooking, hauling and handling. The method of hauling approached that used by commercial vessels, but probably greater care was taken in handling. The test suggests an initial mortality of nearly one-third and a final mortality of one-half for small troll caught Silver and Kings which were released. Because of this high mortality, the investigators felt their regulations requiring the release of small troll caught salmon "does not appear to be a promising conservation measure".

Hints on Transport Live Crabs on Boats

Holding and transporting live crabs to markets where a continuous demand is present has become common practice during the past few years. Crabbers working Hecate Strait, S. E. Alaska, and even from Western Alaska, have landed fares in good condition at Seattle. The crabs are generally held on tiered separators in the hold of the vessel and are flooded with circulating seawater. The September, 1956, issue of the "Progress Reports" of the Canadian Pacific Coast Station reports that crabs are sensitive to changes in water temperature, salinity and oxygen and because of these factors boats carrying cargoes of live crabs must use discretion in pumping sea water while in the vicinity of rivers or harbors if their catch is to be delivered alive. The possibilities of refrigerated sea water for holding crabs bears some promise for crab fishermen. At low temperatures crabs are virtually dormant and oxygen requirements are minimized. It is hoped that prolonged holding can be attained with the elimination of need for water exchange by providing airation and a sea water charge of constant temperature and salinity.

Weather Hinders "Cobb"

The U. S. Fish and Wildlife Service vessel *John N. Cobb* at presstime was reported returning from S. E. Alaska after a six-week trawl survey off the west coast of Prince of Wales Island. Extreme weather conditions were said to have hampered the survey, and only 40 drags were made. Indications of trawlable grounds were found with showings of petrale, dover sole, true-cod and ocean perch found. Best catches reported were those containing perch.

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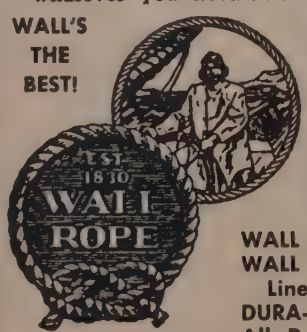

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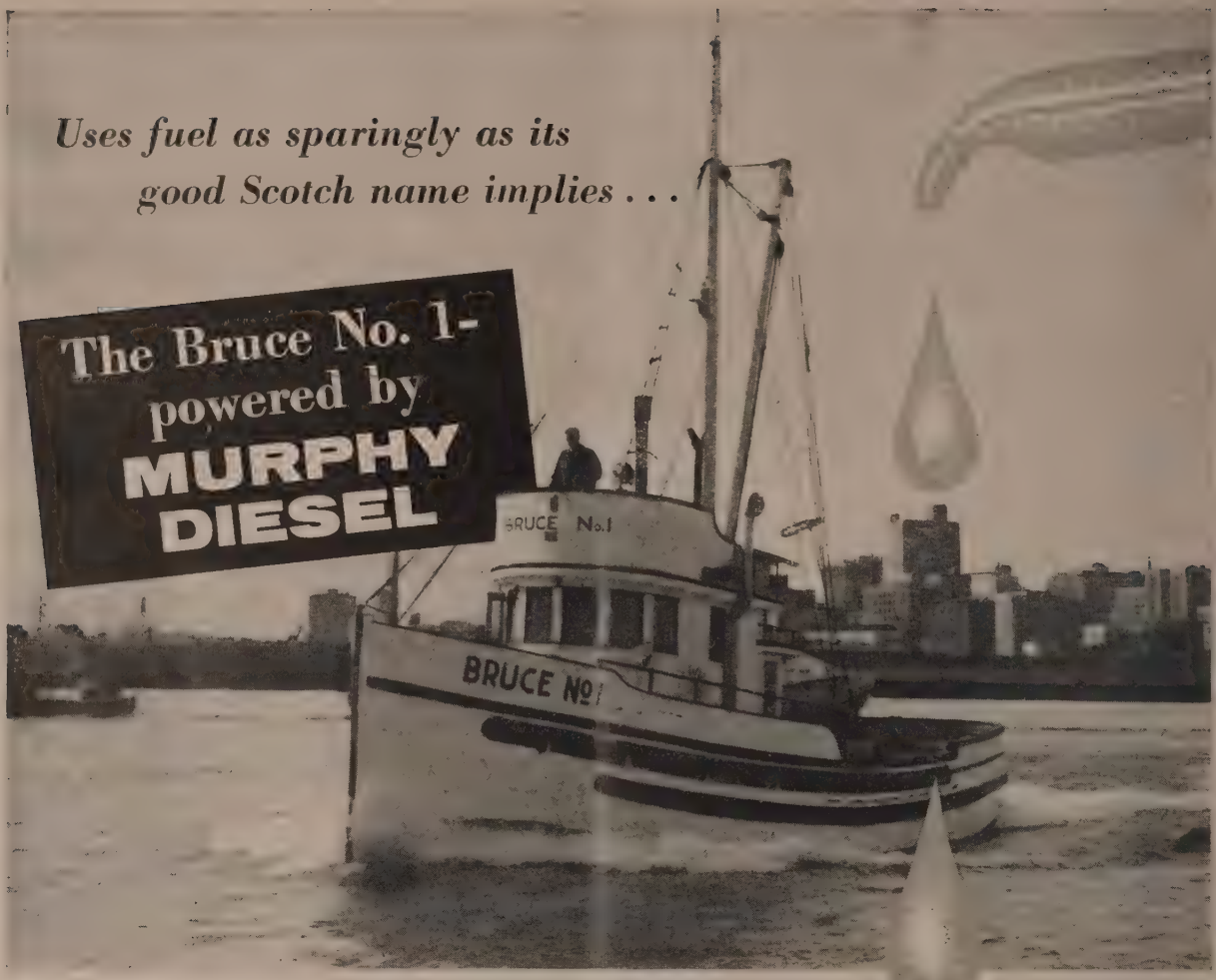

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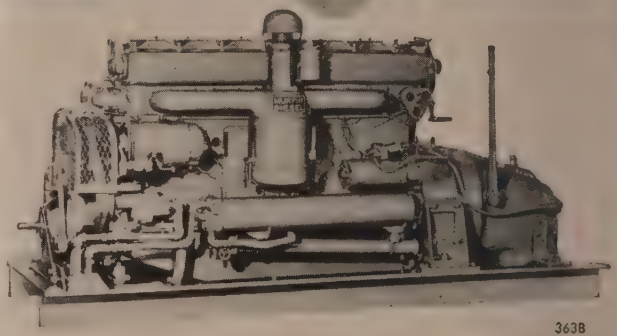

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Pink Salmon Negotiators—This is the group which negotiated the proposed amendment which would bring Pink salmon within the authority of the Fraser River Sockeye commission. Front row, from the left—W. C. Herrington, Department of State, Washington; George R. Clark, Deputy Minister of Fisheries of Canada; Arnie J. Suomela, Associate Director of the U.S. Fish and Wildlife Service; S. V. Ozere, Assistant Deputy Minister of Fisheries of Canada. Second row—Dr. A. L. Pritchard, T. Sorenson, Dr. Ferris Neave, Dr. J. L. Kask, Dr. Richard Van Cleve, Dr. A. W. H. Needler, Blake Campbell, T. LeM. Carter. Third row—James Kinloch, A. J. Whitmore, Miss S. Barriere, Homer Stevens, John M. Buchanan, J. M. Anderson, Carl A. Nelson, J. F. Repanich. Back row—Adolph Dubs, C. Clarke, Robert Clifton, Warren F. Looney, William M. Terry, Milo C. Bell, Dr. W. M. Sprules, Edward W. Allen, Robert J. Schoettler, John S. Wilkinson.

Pink Salmon Treaty Needed for 1957 Season

● Protocol which will bring Pink salmon within the authority of the International Pacific Salmon Fisheries (Sockeye) Commission will be signed shortly by Canada and the United States—in time for it to be submitted early in the new session of Congress.

Signature will give formal, official status to the amendments to the Sockeye treaty negotiated at Ottawa in October. Ratification by the Senate will be necessary to put it into effect before the Pinks appear next year.

● Failure to ratify the amendment in advance of the Pink salmon season of 1957 would be a disaster and an inexcusable affront to the cause of conservation.

The extraordinary degree of support marshalled behind this amendment makes serious delay in ratification unlikely. No fishery proposal within memory has come nearer winning unanimous approval.

As a matter of fact, it is somewhat surprising to find *any* opposition to the enterprise. It must be acknowledged, however, that a few voices have been raised against it on Puget Sound.

Interestingly, they raise the old, traditional objections, almost as though they had been lifted from the speeches of Governor Roland Hartley. Most of these are various versions of "The state can handle this itself"; "Let the state deal with Canada. We can do it better than the Sockeye Commission can."

The fact is, first, that this has been tried many times, and has always failed.

Second, control of the Pink salmon fisheries of British Columbia is in the hands of the dominion government, which will deal only with the federal government of the United States through a formal treaty at the national level.

In actual practice, so far as Washington waters are concerned, the Sockeye Commission operates through the Washington State Department of Fisheries—but an international treaty is essential to apply broadly effective conservation to Pink salmon fished by the fleets of the United States and Canada.

● The means to apply effective Pink salmon research and conservation measures are immediately at hand. Not to use them in the season of 1957 would be a tragic, stupid blunder.

"Corregidor" Towed In After Capsizing

Pacific Towboat & Salvage Company's *Rocket* towed the fishing boat *Corregidor* to Al Larsen's Boat Yard in late October after the vessel, fishing mackerel, turned over. The accident threw the skipper, Wilmer Gillette and crew members into the sea.

The *Lucretia K*, skippered by Don Kusar, picked up the four men and then called for a Coast Guard boat. The boat's net was recovered.

Pacific Towboat & Salvage Company has its offices in Long Beach. In early November, the PT&S tug *Kanak* was on its way to return the tug *Alaska Queen*, off Baja California, to Long Beach.

Bucket Brigade Saves Badly Holed Troller

A collision between Roger Davies' troller *Tucson* and the *Norma B.* off California recently resulted in considerable damage to the former boat. Fishermen left their fishing and swarmed to help the stricken vessel. A bucket brigade was put aboard the *Tucson*, which managed to keep ahead of the water running in through a hole in the bow. Art and Ed Saarinen of the *Hermes* 11 rushed to the boat with a 2" pump and, manned by volunteers, the boat limped into Oakland. Mrs. Davies and her two young children were put aboard the *Norma B.* after the accident and brought safely into port.

Vancouver's Fish Boat Base Ready in Spring

Vancouver expects to have its new $1 million fishermen's wharf in False Creek ready for use by early spring of 1957.

Fraser River Piledriving Co. has been awarded a contract for work on the harbor approaches, wharf and floats at a cost of about $183,000.

Preliminary work, including storage and service sheds and a large area of paving, was completed several months ago.

The harbor will be dredged in January.

Construction of the five floats that will form a part of the over-all wharf will start about the same time.

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SAN PEDRO SEINE SETS

Stella Maris crew members received a second award for heroism in the rescue of survivors of the wreck of the *Western Explorer* last May on the rocks of Socorro Island. . . . This second award was presented at the Fishermen's Fiesta coronation ball by the AFL-CIO Seine and Line Fishermen's union. . . recipients were Jack Shund, Charley Kishiyama, Akira Hamachi, Capt. George Fukuzaki, Ben Fukuzaki, Junji Tani and Stanley Hirotsu, Min Chikami, Carl Shiba, Mine Shibata, Nob Iwasaki and Hoshi Veda. . . John Tripps, Star-Kist vice president, was recently honored by the San Pedro Junior Chamber of Commerce as the "boss of the year" . . . He was praised, in particular, for giving young men in the firm opportunity to advance and for Star-Kist policy of encouraging young employes to participate in community work . . . *Anthony M* was selected as the Queen's Ship to lead the Fishermen's Fiesta Boat parade. . . . the boat is rated the largest purse seiner in the fleet, and is generally skippered by Anton Misetich, who is part-owner in the vessel with other members of his family. . . . the boat also carried many "guests of honor" and press representatives.

FISHERMAN Nick Miachika, a native of Yugoslavia, died recently in a Los Angeles hospital. . . . He is survived by a brother, Matt and cousins, San Pedro . . . Mrs. Roy Katnich, who handled all the details of the Fishermen's Fiesta Coronation Ball, recalls that her husband's boats, *Sea Ranger* and *Sea Boy* have been in every boat parade for the past eight years. . . . In addition to her extensive schedule of community work, she has a family of four youngsters to care for. . . . The widows of three fishermen who died in the wreck of the *Western Explorer* have received death benefits from the Seine and Line Fishermen's Union: Mrs. Mike Bebich, Mrs. Shrio Matsushita and Mrs. Kyoji Nakane. . . . Yoshimatus Masuda represented his daughter, Shizuka, named as beneficiary for his son, Masayoshi, and Mrs. Gentaro Endo, wife of the fifth fisherman lost in the disaster, also received a check. . . . Anton Despol, long associated with the San Pedro fishing fleet, is reported recovering from a stroke. . . . The *Marauder* served as the Fishermen's Fiesta press party boat. . . . and Pan Pacific's famed cafeteria served press members cioppino, prepared by members of the San Pedro Municipal fish markets, with shrimp and fish supplied by those markets. . . . Giosue DiMassa again served as the "old master" of the preparation of the cioppino . . . . Ben Y. Lee, manager of Pan Pacific's cafeteria was in charge of "operation press party serving" . . . Joe Zar's son, Gerald—Joe is manager of the Berth 73 division of Marine Hardware—is the new champion of the Long Beach city junior golf tournament . . . purse seiner *White Rose* has been officially transferred to Juan Perlo, to operate under the Mexican flag. . . . *Tiburon* has been again documented as a fishing boat, owned by Willard C. Hartman, home port Los Angeles . . . she was built in San Pedro in 1946.

Bay Boats Get Radar

The whale killer boat *Dennis Gale*, owned by Hunter & Foland and catching whales for the Del Monte Fishing Co. plant at Pt. San Pablo, Richmond, has been equipped with a Bendix Model MR3B radar, as has the trawler *Edgar A.*, Ed Armstrong, owner and skipper, Coos Bay, home port, by Marine Radio Electronics, Fishermen's Wharf, San Francisco.

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JERRY'S BOAT SALES: For any type or kind of boat or ship. World-wide contacts. Matt Batinovich, owner and broker. New location: 310 West 7th, San Pedro, Calif. TErminal 3-4482.

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Rough Seas Batter "Buena Ventura"

The 65' trawler *Buena Ventura*, owned and operated by A. Paladini, Inc., San Francisco fish producers and wholesalers, narrowly escaped foundering in rough seas off the Golden Gate, but was helped into port safely by the Coast Guard.

Speed Hill, engineer, said that they were about 30 miles off shore from Mile Rock when the seas become so rough they decided to haul in their trawl and head for port. "We were hit constantly by big seas," he said. Late in the afternoon Mr. Hill radioed for help. The boat had shipped a lot of water and much of it was in the engine room. The pumps were reported to have failed but the "Cat" engine kept running. Shortly thereafter a 95' Coast Guard cutter came alongside and put a man with a pump aboard and the *Buena Ventura* continued to Fishermen's Wharf where she was pumped out. Skipper of the craft is Vince Dorio.

250 Diesel Horsepower In Steel 50-Footer

Dana Slater, Martinez, Calif., has had Maritime Steel Fabricators, Oakland, build him a 50 x 14 x 6'6" steel combination boat.

The new vessel was christened *Wanderon* when she was launched this spring. She was designed by Ed Monk, Seattle naval architect, sleeps four in the fo'csle and two in the deck house.

In the pilot house are a Bendix 150 watt radio telephone, Bendix DR12 depth sounder, and Bendix DF, all purchased from Chuck Neumiller, Marine Radio Electronics, Fishermen's Wharf, San Francisco.

She has been powered with a Model D337 250 hp. Caterpillar marine diesel engine, equipped with a Snow & Nabstedt 4.4-1 reverse and reduction gear, with a Twin Disc front power take-off. This equipment, plus a Goodrich cutless bearing, Monel shaft, and 50 x 38 Pitchometer propeller was all purchased from the Thomas A. Short Co., San Francisco.

Janous Marks Recovers

Janous Marks, port captain for Westgate-California, has returned to work following recovery from injuries in a traffic accident in San Diego recently. He was hospitalized for 10 days; his car was demolished.

Nordby Supply Operations Resumed After Fire

Business activities of the Nordby Supply Co., Seattle, are under way at full bell in temporary quarters despite the severe loss suffered when fire swept through its headquarters building Oct. 30. The company was able to make deliveries the next day from its temporary quarters and Salmon Bay branch, according to Lynn Miller, president.

The fire, which was one of the most costly and stubborn suffered by Seattle in years, destroyed the firm's main stock and base of operations. Business is now being conducted from quarters in the Nordby warehouse building at 1304 Post St., near the burned structure. The company's telephone number continues to be Eliot 1364.

Nordby's net loft is now located on Fairview Ave. North (phone East 3559), opposite the Lake Union Dry Dock, with Ormal Richardson, as usual, in charge.

Operations at the Salmon Bay branch, where the telephone is ALder 1150, were not directly affected by the fire.

Immature Fish Dominate B. C. Sport Catch

Commercial fishermen in southern British Columbia waters now have a fairly definite idea as to the competition of sports fishermen.

The Canadian department of fisheries made a spot check August 12, considered an average day from the standpoint of all-round fishing activity, and discovered that on that day sportsmen accounted for 2590 salmon and 3870 grilse, immature salmon or "trout".

The check was a part of the first sport fishing survey of all the principal tidewater fishing areas in British Columbia.

The report shows that on that day, 2890 boats were used by 7909 sport fishermen.

New Propeller Metal Saves Haul Outs

Michigan Wheel Company reports that since the simultaneous introduction of its Michalloy XX bronze and their smaller 5-blade propellers, the Michalloy XX bronze has been found very advantageous in other propeller applications. Originally offered as standard in the small 5-blade propellers as an extraordinary strong metal to compensate for the thinner blade sections, it was found to be of real value in other propeller styles for the high powered installations and commercial jobs where its superior physical properties insure retention of blade accuracy and resistance to fracture under almost all conditions. The company points out that though thousands of applications of their wheels employing this bronze have been made, blade fractures or failures of any nature are virtually non-existant, a factor that represents real economy to the boat operator in avoidance of repairs, down time, etc.

In the commercial boat field, it is said, this metal has also found a very hearty and extensive acceptance. The reasons for this are that this alloy, it is claimed, resists abrasion and general damage to a greater degree than the more expensive stainless steels. Many fleet owners, they say, have standardized on 3, 4, or 5 blade wheels of this metal and thereby reduced haul-outs per vessel by as much as 2 to 6 per year. Michigan Wheel Company claims there is no equivalent alloy on the market.

Moss Landing Fish Boat Sales and Deals

The Monterey vessel *Doris N.* was sold recently by Holly Coxon of Watsonville to David Gassner of Salinas. Randolph Hilton of Carmel has purchased the *Sea Hawk* from I. B. Hawkins of Hollister. Nick Kerr is the new owner of the *Nora R.* The troller was formerly owned by Captain Dick Maier, operator of the dragger *San Vito.*

360 Albacore Tagged

Nautilus of the California Department of Fish and Game tagged 360 Albacore during the current season in the Channel and Farallone Island areas.

Three tagged Albacore and one Bluefin tuna have subsequently been recovered. Six days after tagging, one Albacore was recovered approximately 27 miles away. Forty-one days after tagging, a second was recovered 116 miles from the release location. The third Albacore recovery was made soon after tagging near the area where it was released.

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Skipper Albert Anderson of the M/V Midway says he's never had any trouble with his 165 h.p. Gray diesel in six years of using RPM DELO Oil and Standard's diesel fuel. The 10-year old engine still has all original bearings and, at time of last overhaul, Mr. Anderson reports rings were clear and free..."the engine was clean and in very good condition."

The Midway ranges out of Seattle as far south as Mexico (for tuna), and north to Alaska (after halibut). After six years of such runs on Standard's diesel fuel, Mr. Anderson says, "The diesel fuel always gives me full power and it's so clean I change strainers just three times a year."

For More Information contact your Standard Fuel and Lubricant Engineer or Representative, or write 225 Bush Street, San Francisco 20, California.

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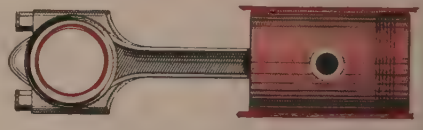

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STANDARD OIL COMPANY OF CALIFORNIA

How Certi-Fresh Packs Sticks in its new Los Angeles Plant

Frozen packages are removed from the plate freezer, where they have been frosted in an hour at minus 50°.

• Newest Pacific plant for fish sticks packing and sea food breading is the Certi-Fresh operation in Los Angeles.

In this new plant, with its 4,500 square feet of cement block construction and insulated ceiling, Certi-Fresh, which is a subsidiary of British Columbia Packers, Ltd., packs nine items for the consumer under the Certi-Fresh label.

The plant was engineered under the direction of the research department of British Columbia Packers and of plant superintendent Harry Hulbert, who has been with Certi-Fresh since 1939, with the exception of a few breaks for Albacore fishing from Newport Beach.

Don Haywood is vice president of Certi-Fresh operations and Bud Bristol is sales manager.

The plant is exceptionally well planned. Breading operations are on a continuous production-line basis. True cod from Canada in frozen blocks is cut to uniform size on three slicing machines, two of which are Butcher Boys.

• Step-by-Step

Taking the processing step by step, in the all-electrically operated procedure, next comes passage of the sticks or other product to be breaded, by wire-mesh conveyor to the first Greer batter machine. The entire automatic, stainless steel breading line was engineered by Greer with the supervision of the Certi-Fresh staff.

The sticks are first dusted lightly in Golden Dipt and then pass through another batterer and are again breaded.

The batter mix is a special formula Golden Dipt product, designed to provide the desirable thin texture which eliminates a heavy coating on the sticks. Mr. Hulbert states that the percentage of breading to fish on the Certi-Fresh sticks averages only 25%.

The batter is continuously circulated on the processing line by a pump system which is an integral part of the Greer line.

Next, sticks pass by wire-mesh conveyor to the especially designed fryer, constructed of stainless steel. Frying medium of the Certi-Fresh product circulates constantly through a filter system to remove particles of breading material. The filter is a Barnes-Drill product, heretofore used in industrial applications, and adapted by Certi-Fresh for seafood frying. Use of this filter keeps the fatty acid content of the oil to 1% or less. Operation is automatic and a special filter paper is used.

Temperature of the oil is thermostatically controlled, at from 280° to 290°F. Installed on the hood over the fryer is an automatic fire extinguishing system to cover any flash fire that might occur.

• Only 19 Minutes

The cooker is heated by natural gas, units totalling 1,200,000 BTU and has two gas vents. A third vent removes the heat from the cooker through the roof of the building, with an exhaust system rated at 3,500 cfm.

BIG ...FOR BIG SAVINGS!

One De Laval-Bird Continuous Meal Recovery Centrifuge does the work of three or four smaller units—with *less* initial cost. . . *less* maintenance . . . *less* operating expense . . . and *maximum* yield of high protein oil!

De Laval-Bird Centrifuges are producing *bigger profits* for major plants on both coasts. **Get all the *money-making* facts . . . *now!***

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THE DE LAVAL SEPARATOR COMPANY Poughkeepsie, New York • 427 Randolph St., Chicago 6 • DE LAVAL PACIFIC CO. 201 E. Millbrae Ave., Millbrae, Calif.

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BUILD QUALITY AS YOU TRIM COST

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- **Storage Depots on East and West Coast**
- **America's Largest Vegetable Oil Tank Car Fleets**

For Complete Information, Phone: **OIL SALES**

A. E. STALEY MFG. CO., DECATUR, ILL.

The plant itself is well ventilated, with incoming air derived from a ground level system, and with numerous fans in the ceiling.

From the cooker, the sticks pass on automatic mesh conveyor to the cooling box, which is of aluminum and enclosed. Cool air for the process is supplied by a five-ton Baker compressor, with the blower located at the end of the box. The air from this process is blown through the box and empties into the packing room.

Breaded Sticks are carried into the intake end of the continuous fryer.

Mr. Hulbert says, "It takes only 19 minutes for processing the sticks from the slicing machine to the packing line."

• Packing Procedure

From the cooler, the sticks are carried on a Goodrich neoprene belt to women workers who arrange them in groups of five before they reach the packing station. As the 8-oz. Certi-Fresh package has two layers of five sticks each, women in one group place five sticks in the package, then a separater sheet of special paper, before the cartons pass along the line to another group of women for the second layer.

Cooked units emerge from the fryer in the middle of the photograph and pass at once into the air cooler for conditioning.

This particular section of the packaging line has two parallel neoprene belts. One carries the sticks for packaging; the other conveys the filled packages to the closing machine by an intricate conveyor system, in which each package is weighed by Toledo scale.

Closing of packages by automatic machine is observed here by Harry Hulbert, manager of the Certi-Fresh fish stick plant.

The four-color overwrap is applied by a Package Machinery unit, and after this fast operation, the packages are placed immediately on plates for quick freezing by Amerio refrigeration with a capacity of 2,600 lbs. per hour, utilizing 20 plates, hydraulically operated.

This quick-freezing unit works with a 30 h.p. Baker compressor and a Frick 30 h.p. booster. Temperature averages minus 50°F., freezing the packages within an hour.

• Distribution Details

If shipping is immediate after freezing—and the demand for fish sticks is heavy—the frozen packages are packed immediately in attractive shipping cartons, white with red and green lettering. Cartons contain two dozen 8-oz. packages.

An efficent feature of the Certi-Fresh operation is the fact that much of the equipment is mobile—even the Greer batter-and-breader line — thus permitting quick adjustment to whatever breaded fish production is called for by the sales and production departments.

The breading division utilizes the refrigerated holding facilities of the fresh fish division of Freeman Certi-Fresh, which is adjacent to the new plant, and the capacity of which is 400,000 lbs. of fresh frozen fish or packaged frozen fish.

In the Los Angeles area, a fleet

of Certi-Fresh operated refrigerated trucks deliver the complete line of seafood products. In addition, fish from plant goes to Nevada, New Mexico, all parts of California, etc.

With its new plant, Certi-Fresh has added another chapter in the progress of the frozen seafood industry of the southwest, a market which is considered to be one of the largest in the country for consumption of fresh-frozen foods.

Product and Personnel — Don Haywood, left vice president of Certi-Fresh, admired the fish sticks package with Edward Roybal, Los Angeles councilman, while Harry Hulbert, plant manager; Jack Karobonic, general manager; and Bud Bristol, sales manager.

The PAK-FORMER

Leading tuna canners are now using the PAK-FORMER for their Chunk and Grated Style Packs. A variable speed drive permits filling speed adjustments of between 140 and 250 cans per minute. Available to the industry under similar terms as our PAK-SHAPER.

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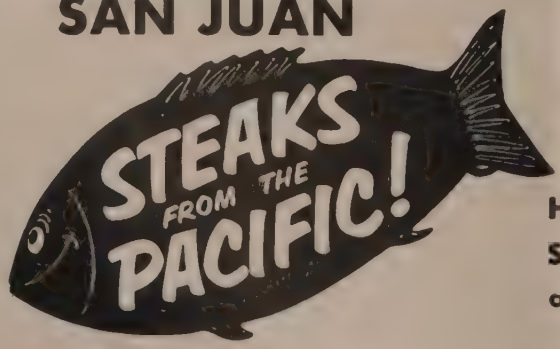

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and now . . .

HALIBUT SALMON and FISH STIX

fresh frozen — breaded — ready to cook

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FOOD FISH MARKETING

Section of PACIFIC FISHERMAN--

News and Views of National Trade in Fish and Shellfish

December, 1956

Lighter Inventories Mark Year-End Tuna Market

Canned tuna inventory is reported somewhat less than at the end of 1955. The Southern California industry felt institutional and brand advertising of tuna and name brands had contributed successfully to reducing the inventory.

In Southern California chain store advertising, prices of chunk, the most advertised item, in late fall included "four for $1.00"; 21c, 23c, 25c and 29c; and a grated pack at 2 for 25c.

Outstanding in the development of the market for canned tuna was the color insert prepared by the Tuna Research Foundation of Terminal Island and used in a home economics magazine. One side was a multi-colored process, with a lead-line of "Nutritional Value of Canned Tuna for Teen-Agers", and emphasized what a 3-ounce serving of canned tuna (drained solids), contributes to daily nutritional needs of girls and boys: for girls, 33% protein, 17% phosphorus; 8% iron, 7% calories, 5% riboflavin, 3.1% thiamine and 2% vitamin A. The same insert, in color, had a chart indicating that, for boys, a 3-ounce serving of canned tuna supplied the following nutritional needs: protein, 25%; phosphorus, 17%; iron, 8%; calories, 4.5%; riboflavin, 4%; thiamine, 2%; and vitamin A, 2%.

The opposite side of the two-page insert, in black and white, emphasizes the "Nutrition Value of Canned Tuna in the Diet of the Family—listing the solid pack tuna, 7-ounce can, and the chunk style, 6½ ounce; and the fact that the soybean oil in which tuna is packed is excellent as a base for sauces, salad dressings and for seuteing.

The insert further emphasizes the fact that the vitamins, minerals, amino acids and important trace elements in canned tuna are essential for healthy nerves, good appetite, normal growth, clean skin, resistance to infection and for good eyesight, in connection with good nutrition for teen-agers and for proper feeding of a family.

In connection with Seafood Week in the Los Angeles area, advertised breaded fish sticks, some processed outside of California, ranged in price and in size from a 10-ounce package at 33c, an eight-ounce package at 33c, a 14-ounce package, fried, at 55c; and a one-pound package at 57c.

One brand was advertised as a "family size 16-ounce pack" at 59c.

An interesting fish to be advertised in the fresh fish field, Los Angeles, was Mahimahi, fished by Hawaiian boats.

It is apparent that San Diego is becoming increasingly "fish conscious", judging by the advertising of such items as fresh frozen shrimp, breaded shrimp, fish sticks, Orica swordfish, frozen and fillet, Ruperts cod and perch fillets, breaded haddock, perch, sole, etc.

Southern California Fisheries Association, Los Angeles, has named lobster as the November seafood of the month, with shrimp and oysters. Comments on the success of Seafood Week in the Los Angeles area include the following:

Louis Vitale, president: "The biggest sales week of the year for us, with more to follow";

Aldo Casaretto, vice president: "Highly pleased with the recognition given our industry";

Ed Amende of Amende & Schultz: "The cooperation by all media was terrific";

Glen Baker of Baker-Johnson, former president of the Association: "Our Seafood Week program achieved the greatest area concentration of publicity and advertising ever accomplished by the seafood industry. . . The results of this promotion will be felt not in a single week but in future months."

Tuna Rate Rise Delayed

Trans-Pacific freight rate increase on frozen tuna, due to rise in September from $55 to $61.75, was postponed for two months by the steamship conference at request of the Japan Frozen Food Exporters Association.

Frozen Tuna Imports Rise Sharply in B.C.

Canada is importing more tuna from Japan than ever before, and the reasons are obvious — comparatively light stocks of domestic fish for canning, no Canadian-caught Albacore at all, and a rapidly rising demand for canned tuna in the Canadian market.

B.C. Packers, Ltd., is the only Canadian company importing tuna and the exact tonnage is not available, but company executives state that the volume of imports from Japan in 1956 were at least 25% higher than in 1955.

Frozen tuna has been one of the major items in the freight unloaded in British Columbia ports by Japanese and other cargo carriers. Most of the shipments go direct to the B.C. Packers plant at Ogden Point, at the entrance to Victoria harbor, although most of the processing and canning is carried out at the company's giant Imperial plant at Steveston. The canning of Japanese tuna has been an important factor in providing for year-round operation of this plant and stabilizing the labor force.

B.C.-canned imported tuna has won ready acceptance throughout the Canadian market and sales have been particularly good during the past year. At a time when the industry has been hard pressed to maintain an adequate supply of canned salmon, the canned tuna stocks have been a welcome addition. British Columbia became an important importer of Japanese salmon for canning this year..

SEATTLE MARKET

Openly quoted prices for canned salmon on the Seattle market at presstime of this issue are given below on the basis of cases of 48 tins, fob. Pacific terminals for good, standard quality.

Alaska Salmon:	
Sockeye, talls	$33.00-34.00
Sockeye, halves	21.00-23.00
Chinook, talls	29.00-30.00
Chinook, halves	17.50-18.50
Pink, talls	23.00-24.00
Pink, halves	12.50-13.50
Medium Red, talls	29.00-30.00
Medium Red, halves	16.00-16.50
Medium Red, quarters	9.50
Chum, talls	21.00
Chum, halves	11.50-12.00
Puget Sound Salmon:	
Sockeye, halves	23.00
Sockeye, halves	24.00
Sockeye, quarters	13.00

How Quiet Can a Market Be?

● Heading into the holidays, the canned salmon market was as quiet as the Volunteers for Stevenson headquarters on November 7.

About the only thing the broker boys had to sell was some Japanese goods, and even there the most desirable items—meaning the talls—had been pretty well picked over.

There were Pink halves, both Japanese and domestic, but relatively little else. The domestic Pink halves universally were held at $13. Japanese goods of the same sort were $12.50, but due to advance to $13 at the first of the year—an announcement whose importance lay principally in the fact that it gave everyone a fair chance to stock-up at the lower figure.

Chum talls, origin not specified, were still available at $21.

Seems odd, but Chums were priced $2 higher at $23. There were still a few—a *very* few—four-pound Pinks available at $25, but Reds were gone entirely and Cohoes in fours could not be had under $31.

Last sale of Red talls, packed from frozen fish, was reported to have been at $32.

Gilcrist Now Manages No. Calif. Sea Food Inst.

John P. Gilchrist, legislative representative of the Northern California Food Institute, San Francisco, since that group's inception has accepted the position of paid general manager of the group.

Joseph C. Tarantino, Bell Smoked Fish Co., San Francisco, who had been secretary, was forced to resign this position due to the press of his business and civic duties.

"Pacific Harvest" Brilliant Booklet by Canfisco

The Canadian Fishing Co., Ltd., is distributing a brilliant booklet featuring the company's varied products, but also devoting pages to the history of the company and the Pacific fishing industry, as well as to how and where and when the primary Pacific sea foods are caught and packed.

As an example of four-color lithography and editorial concept, the booklet is outstanding. To the merchandising of Pacific sea foods, it is a brilliant contribution.

Our Apologies

Please accept apologies: in the November issue of the *Pacific Fisherman*, covering National Fish Parade, Los Angeles Area, it was stated that Aldo Casaretto was regional vice president of NFI. Instead, Mr. Jack of the E. C. Jack Brokerage Company of Los Angeles is vice president of Region 4. And Mr. Casaretto is national secretary of the NFI. Please, Mr. Jack and Mr. Casaretto, accept the fact that even reporters are only human!

Tuna Fillets, New Process Feature Van Camp Ads

Van Camp Sea Food Company, through its advertising agency, Erwin, Wasey & Company, Ltd., Los Angeles, is carrying-on a national campaign, with a new approach, emphasis on the tuna loin itself. Malcolm Goldie, sales promotion manager for the Van Camp company, states that "referring to the description of Chicken of the Sea tuna, *prime fillet*, carefully *pressured baked*, the technique of packing has recently been altered."

They Add Up To A Lot of Sales!

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SALES COMPANY
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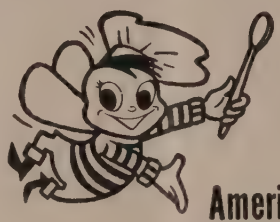

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Bumble Bee Seafoods
Columbia River Packers Assn., Inc.
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the BRAND of DISTINCTION

Another OXENBERG Product

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INDEPENDENT SALMON CANNERIES, INC.
KETCHIKAN, ALASKA
Office: BELL STREET TERMINAL, SEATTLE 1

"Breast-O'-Chicken" In New N.W. Markets

Mailliard and Schmiedell, food brokers, will handle distribution of *Breast-o'-Chicken* canned tuna in the new outlets of Walla Walla and Spokane in Washington state.

This same firm handles the company's products in the Los Angeles and Portland areas. Advertising of this canned tuna in the new sales area was by newspapers and television.

Many Westgate officials were in attendance at the convention of the National Association of Food Chains in Chicago early in October: James B. Lane, president; Larry Kaner, advertised brands sales manager; Jack Buchanan, direct sales manager; Harold Requa, sales promotion manager; Ken Thurston, account supervisor from the agency handling Westgate's account; and Wesley D. Palmer, central division sales manager.

LASSCO Packing Crab And Lobster Cocktail

Louis Vitale, head of Los Angeles Smoking & Curing Company, is now packing, at his Santa Cruz plant, lobster and crab cocktail in 4-ounce jars. These two new products supplement his seafood cocktail line.

Mr. Vitale is the new president of the Southern California Fisheries Association.

Pacific Shrimp Trade Takes A Look at Standards Plan

Voluntary industry standards for grading breaded shrimp were discussed by industry and Fish and Wildlife representatives November 9 in Los Angeles.

Arthur Nolte of the Fish and Wildlife Service, was chairman of the meeting, working with Harris Magnusson, director of the NFI technology division.

M. J. Delaney, Los Angeles official, discussed the legal approach to evaluating the full weight of breaded shrimp at the time of packing as compared to time of cooking—in other words, the tolerance factor.

The problem of de-frosting glazed shrimp, with its loss of weight-factor, and then the breading and re-freezing stages was discussed.

The general outline of proposed standards for grades of frozen raw breaded shrimp include: (1) product description, styles, types and grades; (2) sizes and weights; (3) factors of quality; (4) definitions and methods of analysis; (5) lot certification tolerance; and a (6) score sheet for frozen raw breaded shrimp.

Styles of frozen raw breaded shrimp involve "light breading," with average weight of the batter and breading no more than 30% of the total weight of the whole frozen raw breaded shrimp.

"Medium breading" is more than 30% and not more than 40%.

"Heavy breading" is more than 40% and not more than 50%.

Types of breaded shrimp are proposed to be defined as *Fantail* (butterfly); with tail attached and with or without the shell segment immediately adjacent to the tail fin;

Round Fantail—round shrimp with tail fin attached and with or without shell segment immediately adjacent to the tail fin.

Split Shrimp without fantail—butterfly shrimp without attached tail fin or shell segments.

Round Shrimp without fantail—round shrimp without attached tail fine or shell segments.

Present were representatives from the Los Angeles seafood industry, including Southern California Fisheries Association, Roze Frozen Shrimp, Neptune Sea Food, Golden Dip, Coral Queen and Sea Pak.

* * *

Dick Wigginton, formerly in the wholesale food business, has been appointed manager of the consumer frozen packaged fish department of Norfish Sales Co., Oakland, Calif., distributors of sea foods.

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TRADE MARK
PRODUCTS, INC.
GENERAL OFFICES — NEW YORK CITY
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FISH OF ALL KINDS
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SEATTLE 1 U.S.A.

What Happened to Chums? Gravely Asked in Canada

Two successive years of relative failure of the Chum salmon run in British Columbia waters are causing deep concern in the industry. Seriousness of the situation is underscored by the fact that no one has yet come up with a ready explanation for it.

Total pack of chums in British Columbia in November was a little more than 200,000 cases. It was even less in 1955, but in 1954 the Chum pack at the corresponding period was more than 567,000 cases; in 1953 it was 377,500 cases. While 1952 was an off year, the pack in 1951 was nearly 440,000 cases. The ten-year average pack has been well above 400,000 cases until this past season.

"The situation is bad enough when you consider that we've had two bad years in a row", said R. E. Walker, president of B.C. Packers, Ltd. "But it is even worse when you consider that it probably means we will have poor runs three and four years from now."

Mr. Walker, who has been a member of the Fisheries Research Board of Canada for many years, told *Pacific Fisherman* that he intends to introduce the problem of the Chum salmon fishery at the next meeting of the board. There has been relatively little effective research on Chums and this is largely attributed to the fact that until recently the Chum runs have been maintained fairly consistently. Another factor, of course, has been that economically the Chum has been inferior to Sockeye and Pinks with less favor on the higher-priced markets.

Failure of the Chum run this season was a severe blow to all commercial fishermen engaged in that fishery, but it was particularly tough for the seine fleet since a large proportion of the seiners regularly engage in Chum fishing.

The general assumption is that the cause must be sought in offshore conditions, as in the case of Sockeyes in 1955, when it was indicated that unfavorable feeding conditions were at least partly responsible for a reduced run.

U.S. Tuna Orders

Westgate-California Tuna Packing Company has now completed delivery on two major government contracts of tuna, one for the U.S. Army, ½-lb. and 4-lb. cans. The four-pound tuna, 1,950 cases, are being used by the Veteran's Administration. The pack of 19,773 cases of ½s have gone to the U.S. Army.

"Tuna-4-Cats" Hits Market in Bay Area

Tuna-4-Cats, a new cat food packed in the conventional 6½-oz. flat round tuna can is being introduced in northern California by Washington Fish & Oyster Co. of California, San Francisco.

The cat food is all red meat tuna, obtained from the scrapings of the tuna loins, and is packed by Washington Packing Corporation, Pier 92, San Francisco. The pack is distinguished by a very clever label.

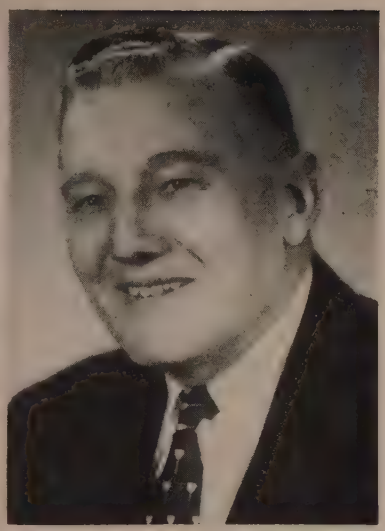
California Fish Sticks Demand Continues Brisk

Consumer interest in fish sticks continues unabated in Southern California, regardless of the fact that Eastern markets report a definite leveling-off the demand there, according to J. N. Hyland, vice president of British Columbia Packers, Ltd., in charge of marketing.

This company, through its American subsidiaries Certi-Fresh Foods and Rupert Fish Co., is a commanding figure in the Southern California market, where it recently brought its new frying and breading plant into operation.

Mr. Hyland believes that maintenance of the demand for fish sticks is directly related to maintenance of quality at the highest standards. Where sticks have stayed at a high level of quality, they have enjoyed high demand, he finds.

Neil Taylor, head of Norfish Sales Co., Oakland, is back after an extensive motor trip to the Pacific Northwest, including Vancouver, B.C., during which he visited most of the fish and shell fish producers in the area.



R. A. **Littlefield,** Seattle Seafoods, Inc., newly elected president of the Pacific Northwest Fisheries Association.

Rufe Littlefield Heads N. W. Fisheries Association

Northwest Fisheries Association, composed of fresh and frozen fish businesses, in November elected R. A. Littlefield, president of Seattle Seafoods, Inc., as its president for 1957.

W. C. Eardley of Eardley Fisheries Co., is vice president; Clifford Gilker of Booth Fisheries Corporation is secretary; and Walter Johnson, Halibut Producers' Cooperative, is treasurer. Charles R. Pollock continues as executive secretary.

Trustees elected for three-year terms are: Douglas Hager, New England Fish Co.; Norman L. McGregor, San Juan Fishing & Packing Co.; Norman E. Weitkamp, Washington Fish & Oyster Co.

Fraser Escapement O.K. Despite Reduced Run

● A decline of 14% in the 1956 run of Fraser River Sockeye, including the commercial and Indian catch as well as the escapement, is reported by the International Pacific Salmon Fisheries Commission. This figure is in relation to the brood year of 1952.

In 1955 the run was off 17% relative to the brood year 1951. Survival conditions affecting the 1956 run were slightly better than those affecting last year's run; but a negative condition existed which is not considered to be representative of normal productivity.

Despite the decline in the total run special consideration was given to obtaining adequate escapement, which actually was higher than in the brood year, escapement of Sockeye actually being 888,000 fish, or 32.2% of the total run.

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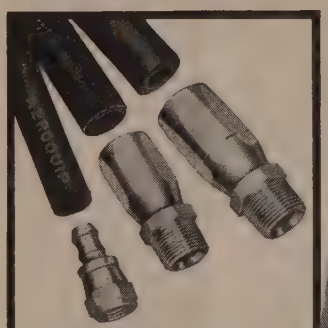
Aeroquip Catalog No. 301* Gives Complete Information on Flexible Marine Piping

*Replaces No. 300



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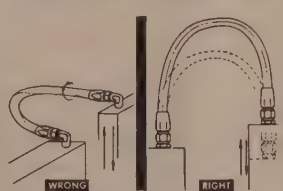
Fittings in flange, sil-braze, pipe thread, swivel nut, dogleg, walseal and union end, plus adapters.

Self-Sealing Couplings for quick connection and disconnection of piping.



Aeroquip offers engineering data on hose performance plus a routing and installation guide.

The new Aeroquip Marine Catalog is the most complete, most up-to-date reference available on flexible piping for all hull and engine applications. Included in this 54-page fully illustrated book are 12 pages of valuable engineering data to assist you in designing or converting to time-saving, cost-cutting flexible piping systems. Write today for your *free* copy of Aeroquip Catalog No. 301.

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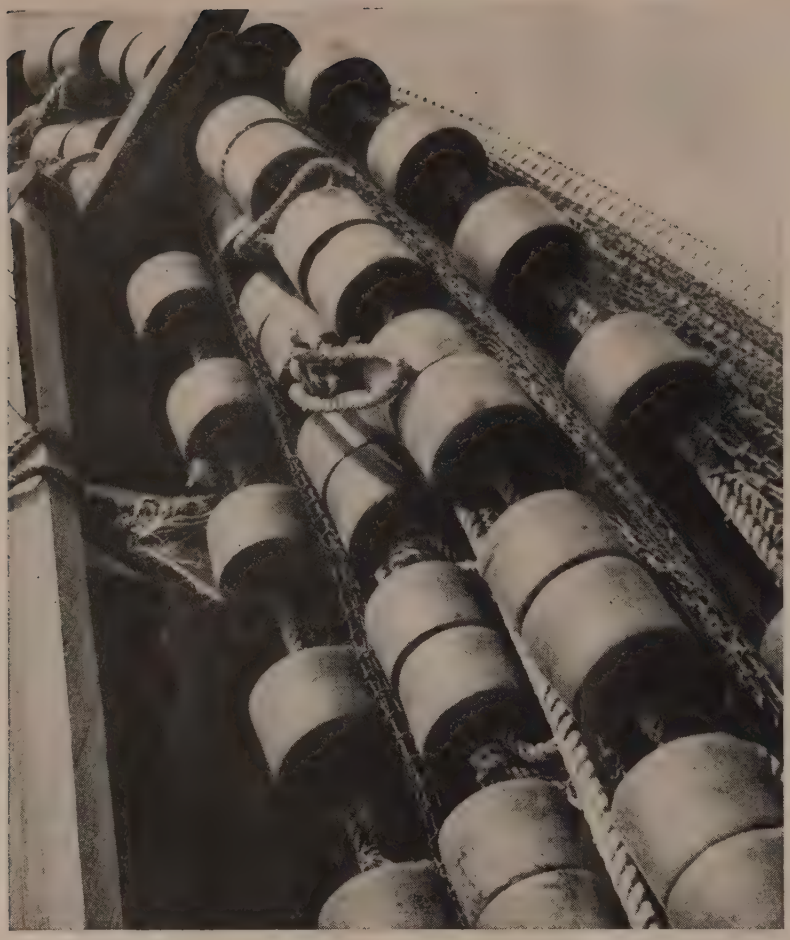

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ARK Plastic Floats were specifically developed to give commercial fishermen a better float. They outwear cork by a wide margin. They are 52% lighter than cork – and 15% more buoyant. ARK Plastic Floats do not rot and they resist damage if they are crushed between boats or run through the rollers of a net puller. Unlike cork, these floats *cannot* absorb water – that means they maintain their floatability. And just for good measure, 87 plastic floats do the job of 100 cork floats of the same size. Why don't you test them for yourself? Contact the supplier nearest you.

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MAKERS OF FINE NETTING FOR OVER A CENTURY

G. J. Alexander

George Alexander Retires From B.C. Fisheries Post

George J. Alexander, one of Canada's foremost authorities on Pacific fisheries, recently retired as British Columbia's deputy minister of fisheries, a post which he has held for the past 22 years.

Before joining the provincial government service in Victoria Mr. Alexander had been with Canadian Fishing Co. in various capacities since 1919, when he returned to civilian life after war service.

Born in Peterboro, Ont., in 1891, Mr. Alexander was educated there and went to British Columbia in 1909. He joined the Canadian Expeditionary Force in 1919 and continued in military service until after World War I ended.

Mr. Alexander initiated many progressive administrative measures related to fisheries during his lengthy term of office.

Two Tuna Canneries For Gulf of Mexico

Deep South reports say that there'll be two tuna canneries operating on the Gulf of Mexico by the first of the year. They will be supplied with tuna from the Gulf and Caribbean by a fleet of vessels operated by Cecil Drake, formerly in the California tuna fishing business.

Expected to be in operation in December was the Bluff Creek Canning Co., at Vancleave, Miss., a partly-owned subsidiary of John Morrell & Co., meat packers.

DeJean Packing Co., Biloxi, Miss., one of the leading factors in the Gulf shrimp business, will be active in tuna canning by early January, Elmer Eilliams, partner, announces.

Each plant is expected to produce from 1,000 to 1,200 cases weekly.

Daniel B. Miner Passes

Daniel B. Miner, 74, who established the Dan B. Miner Co., advertising, died Nov. 10 after an illness of three weeks.

His agency has handled several seafood accounts, including that of Freeman Certi-Fresh.

Roy Preston Harper Dies At San Marino, California

Roy Preston Harper, whose name has been associated with the merchandising of canned tuna, specifically Chicken of the Sea, died November 9 at the age of 62, at his San Marino home in California.

Mr. Harper started selling tuna for the Van Camp Sea Food Company, under Frank Van Camp, in 1921. Mr. Van Camp was later succeeded by his son, Gilbert Van Camp, who is now president of the company.

Mr. Harper was vice president in charge of sales when he, Frank Van Camp, and Bismark Houssels opened sales office in Los Angeles. This followed the merger of the Nielsen & Kittle Canning Company, White Star Canning Co. and the International Packing Corporation with Van Camp Sea Food Company to form Van Camp Sea Food Company, Inc.

Roy Harper was destined, after the merger in 1922, to become one of the outstanding merchandisers of tuna; in particular, he developed consumer acceptance of Yellowfin, when the Albacore suddenly "disappeared" in California waters. He retired from active work with Van Camp in September of 1954.

There is probably no one in the tuna canning industry who will not acknowledge that Roy Harper made a great contribution to selling tuna to the American housewife. He will be greatly missed.

Sperm Whale Scarcity Drops B.C. 1956 Kill

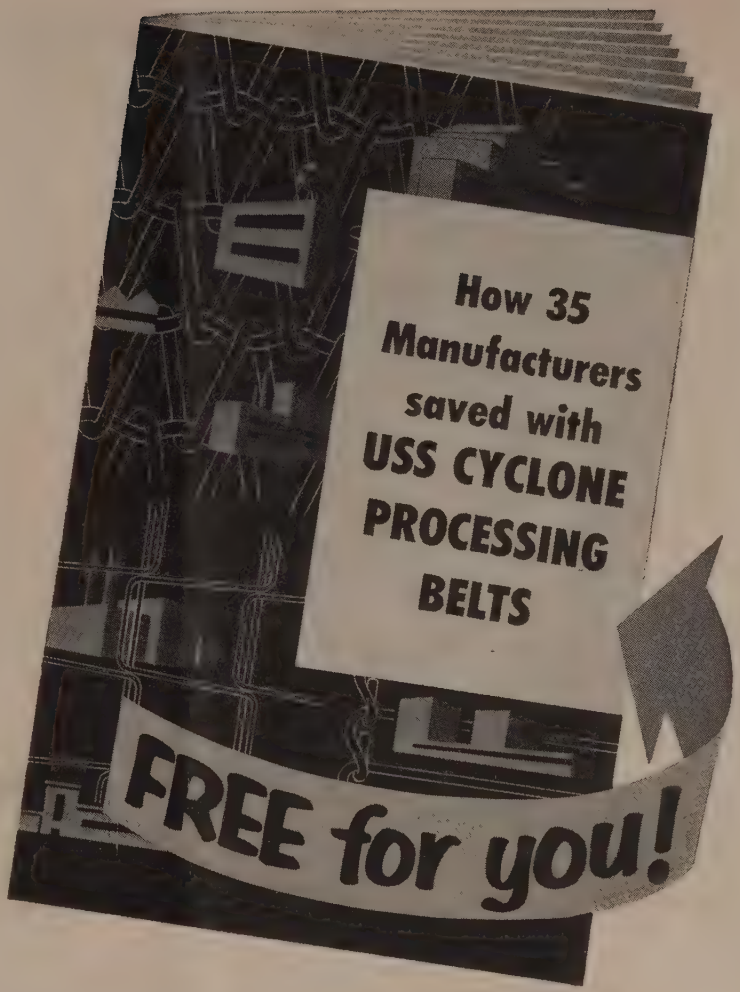
Sperm whales gave the British Columbia coast a wide berth while B.C. Packers' killer ships were at sea in 1956 with the result that they accounted for less than half the season's catch.

Sei whales were scarce, too, but finbacks were fairly numerous.

Tonnage of whales caught by the B.C. Packer fleet, operating out of Coal Harbor, Vancouver Island, was down about 20% from 1955. The actual number of whales caught was down about 40% from the 1955 total of 630.

Unfavorable weather was in part responsible for the lower returns. June is usually the best month of the year for whaling operations, but the fleet spent nearly three weeks of that month in harbor waiting for better conditions.

It is presumed that during that period the sperm whales were moving along the coast as they generally travel in surges. By the time the fleet went to sea the area was virtually free of this variety of whales.



A book on production line savings . . .

Here are specific stories of how thirty-five prominent manufacturers managed to cut down on production costs by using Cyclone Processing Belts. In each case, costs slid down when Cyclone Processing Belts started up.

Send for this *free* booklet illustrating actual techniques and uses of production line methods. It's chock full of ideas that add up to dollar and cents savings. We've chosen each example carefully to cover as many fields as we could. You'll find Cyclone Processing Belts used in acid, heat, water, brine and many other operations. Just clip the attached coupon and mail it. It will pay you to do it . . . TODAY!

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...what's the difference?

Gold Medal Netting is more than a combination of holes in the right places. A good net can mean the difference between profit and loss. That's why successful fishermen choose Gold Medal Netting. It has earned a reputation for catching and holding fish. Produced by a company which has been making fine netting for over a century.

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Cincotta Bros.
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Oregon Marine Supply Co.
235 S. W. First Avenue
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Pacific Fishing & Trading
1403 W. 45th
Seattle, Washington

Pacific Marine Supply Co.
1217-1223 Western Avenue
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MAKERS OF FINE NETTING FOR OVER A CENTURY

Salmon Industry's Growing Interdependence Pinpointed

• Broadened responsibilities and growing interdependence of all elements of the Alaska Salmon Industry, Inc., were emphasized to the membership at its annual meeting in Seattle November 20 by W. C. Arnold, general manager. He pointed to the persistent pressure of international salmon fisheries in the high seas, and the implications of the threatened development of a net fishery for salmon outside of territorial waters.

A second term as president was voted Oscar Bergseth by the Alaska Salmon Industry, Inc., at its annual meeting in Seattle November 20. He is general superintendent of the New England Fish Co.

William Calvert of the San Juan Fishing & Packing Co. was elected first vice president and Charles Turner of the Chignik Fisheries Co. was chosen second vice president. Leo Kreielsheimer, president of Kadiak Fisheries Co., was re-elected secretary-treasurer.

Trustees were elected by districts as follows:

Bristol Bay — Guy V. Graham, Libby, McNeill & Libby; William B. Wootton, Columbia River Packers Association; Aubin Barthold, Alaska Packers Association.

Alaska Peninsula — William Lilly, P. E. Harris Co.; S. G. Tarrant, Pacific American Fisheries; E. E. Murray, Alaska Pacific Salmon Corporation.

Kodiak Island — Charles Turner, Kadiak Fisheries Co.; William Calvert, San Juan Fishing & Packing Co.

Cook Inlet—Vance Sutter, Fidalgo Island Packing Co.; Jack Lind, Alaska Year-Round Canneries; Joseph Fribrock, Snug Harbor Packing Co.

Prince William Sound—Joe Most, Copper River Packing Co.; C. F. Johnson, Port Ashton Packing Co.; Milton G. Brown, Ellamar Packing Co.

Southeast Alaska, North — Charles D. Alhadeff, Whiz Fish Products Co.; Albert Thompson, Hood Bay Salmon Co.; Oscar Bergseth, New England Fish Co.

Southeast Alaska, South — A. E. Brindle, Ward's Cove Packing Co.; H. B. Friele, Nakat Packing Corporation; William Coyne, Annette Islands Canning Co.

Tyee Canning Operations Consolidated With Kake

Charles Alhadeff, head of the Whiz Fish Products Co., announces that this company's cannery at Tyee, south end of Admiralty Island, Alaska, is being dismantled: the Whiz canning operations in Alaska being concentrated in the Kake plant of the Keku Canning Co. under a long-term operating contract with the Alaska Indian Service. The Tyee cannery, last operated in 1954, was established about 1925 by the Sebastian-Stuart Fish Co., being later bought by Whiz.

The canning line at Tyee, for 1-lb. talls, has been purchased by the Juneau Cold Storage Co., which is said to be installing a good-sized canning department for 1957. This will replace the cannery operated in 1955 on Juneau Cold Storage premises, by Alaska Fisheries, Inc., which was burned out last spring: the latter company having meanwhile been discontinued.

Detroit Diesel sales specialists concentrated on the Pacific Coast this fall when R. E. Hunter, general sales manager, Detroit Diesel Engine Division, General Motors Corporation, headed a large delegation to Los Angeles. Left to right—J. C. Campbell, Detroit regional manager; D. E. Schwendamann, Chicago regional manager; Hunter, who makes his headquarters in Detroit; R. L. Burpee, western regional manager, who makes his headquarters in San Francisco; and J. J. Crowe, Los Angeles zone sales manager.

Indian River Fishways Installed Near Butedale

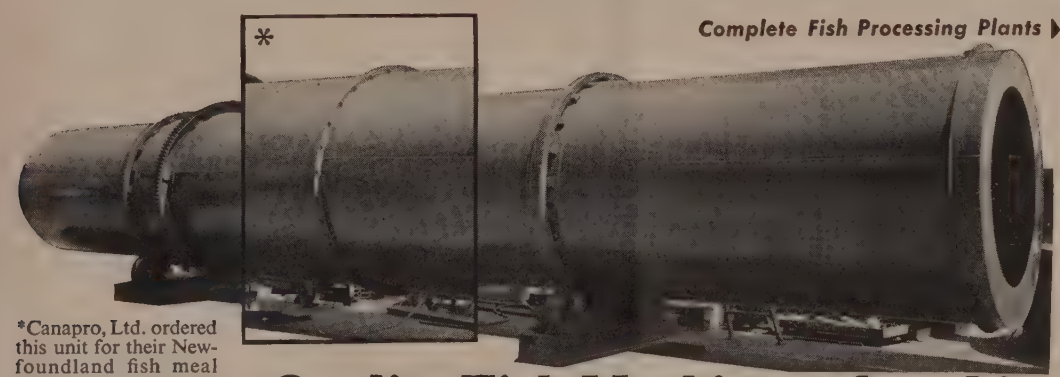
The Canadian department of fisheries has completed fishways on Indian River, a stream which originates on Princess Royal Island near Butedale. This newest aid to British Columbia salmon runs is the first of three units, planned to stabilize an extensive potential salmon spawning system in the central coast area of the province.

Biological and engineering surveys made over several years indicated need for practical assistance to salmon which pass through Graham Reach and help to maintain an important salmon fishery.

The fishways are of the vertical slot baffle type. Two other units are in the planning stage.

Surveys show that the present maximum population ranges from 10,000 to 20,000 Coho, 20,000 to 50,000 Pinks and 500 to 1,000 Chums. The tributary system is believed capable of supporting much larger runs.

Complete Fish Processing Plants

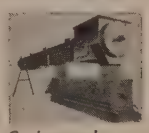


*Canapro, Ltd. ordered this unit for their Newfoundland fish meal plant . . . with the extra, specially designed, self-aligning flange in the center for installation in "an inaccessible location." Alignment was perfect!

Retorts with quick closing doors

Conveyor type packing tables

Air conveying and sacking equip.



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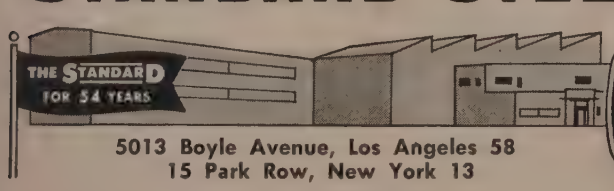

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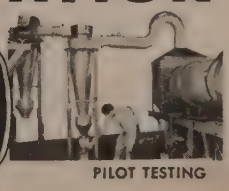

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FOR HALF A CENTURY
"MAKERS OF JOE'S GEARS"
THE SNOW-NABSTEDT GEAR CORP. HAMDEN, CONN
50 S-N FIFTY YEARS OF BETTER GEARS

Geo. Castagnola's Daughter To Marry Senator's Son

Mr. and Mrs. George V. Castagnola, of Santa Barbara, have announced the engagement of their daughter Virginia Ann to James Hollister III, son of State Senator and Mrs. James Hollister Jr.

Castagnola is a well-known participant in the fishing industry at Santa Barbara, where with his brother, Mario, he operates the retail and wholesale fish operations under the name of George V. Castagnola Company in Santa Barbara.

W. W. White, Fish Seller, Dies at Work

William W. White, associated in the wholesale and retail fisheries in the Los Angeles area, died of a heart attack at his work as manager of the retail outlet for Ocean Foods Corporation of Beverly Hills, California. He was 53.

The market is associated with the Pelwhite Co., fish wholesalers of Beverly Hills. Two other White brothers are active in the fish operations, which include the very fine retail outlet at the famous Farmer's Market in Los Angeles. They are O. E. White and O. R. White.

Alaska Trolling by outboard from a stock commercial-cruiser from Bryants Marina, Seattle, as it is pictured in the U.S. Fish and Wildlife Service film on commercial fishing with outboard motors, financed by Outboard Marine Corporation, manufacturers of Evinrude and Johnson motors.

Lobster Freezing Plant

A plant for freezing lobsters in Ensenada for export to California has been completed. Ben Duncan, Baker Engineering Company refrigeration engineer, with offices in San Pedro, supervised the two-stage system. The company in Ensenda is known as Mar Pacifico, Robert Cordova, operator.

You can bet your last
FIN on **Archer "S"**
America's finest
Soybean Salad Oil

If you'll *taste—smell*—and *try* Archer "S" Soybean Salad Oil, you'll see why so many tuna processors are using it.

These processors know that Archer "S" *keeps* the delicate tuna flavor. Helps build customer demand for their products—fast! That's because Archer "S" is refined and deodorized by a continuous ribbon process . . . cannot vary in quality. Every time you order Archer "S" Soybean Salad Oil, you get the *same* clarity of color . . . the *same* purity and blandness.

Archer "S" Soybean Salad Oil

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724 Investors Building, Minneapolis 2, Minn.

LINES and LEADERS

Universal Motor Co. Buys Nordberg Gasoline Engine Line

As of November 14, 1956, the Universal Motor Company of Oshkosh, Wis., purchased all of the assets of the gasoline marine engine division of the Nordberg Manufacturing Company of Milwaukee, Wis.

Universal's plans call for continuing the "Nordberg" line as a separate division. These engines in the future will be manufactured in Oshkosh; moving operations have already started.

Norman Wuotila, the Nordberg service manager, is moving to Oshkosh immediately to help carry on the operations of this new division for Universal, continuing Nordberg's former policies, dealer organization, prices and line, with the general cooperation of Clyde Smith of Universal. In addition, the following staff people also are moving to Oshkosh on a temporary basis for a period of three or four months to help establish this new division, namely, H. E. Fellows, formerly manager of this division, and Harold Griswold, assistant manager.

Nordberg is one of the world's leading manufacturers of large diesel engines, mining, crushing, and railway maintenance equipment, employing 3,500 people. Increased requirements for production facilities for Nordberg's major products made the sale advisable. Universal was Nordberg's choice to carry on the splendid reputation, prestige and service of its gasoline marine engine line.

The Universal Motor Company is one of the nation's oldest manufacturers of marine engines, having been founded in 1898, and is said to have the largest and most modern manufacturing plant in the industry devoted to the manufacture of gasoline marine engines.

Universal guarantees to continue to service all Nordberg gasoline marine engines out in the field, and within a matter of weeks, expects to give such service on a "same day" service basis.

Ralph Westphal Heads Seattle Bludworth Marine Office

Bludworth Marine, manufacturers and distributors of precision electronic equipment for navigation and underwater survey, has announced that Ralph Westphal is now in charge of the Company's Seattle office, 2419 Market Street, replacing Milton Crane who resigned to engage in another line of activity. Mr. Westphal, a local Seattle resident who has been in training with Bludworth Marine in New York for the past year, is a fully qualified sales and service representative possessing an F. C. C. radio telephone license with radar endorsement.

Bludworth Marine, established in 1926, is a division of Kearfott Company, Inc., a subsidiary of General Precision Equipment Corporation.

John Pope New Chrysler Dealer in L. A. Area

John Pope Marine Services, 216 E. Anaheim St., Wilmington, Calif., has been appointed Chrysler Marine Engine Dealer for the county of Los Angeles with the exception of the city of Santa Monica. John C. Pope and David L. Sirota are copartners of the firm.

Enterprise Names Merton Boomer To Process Equipment Division

Merton Boomer has joined Enterprise Engine & Machinery Co. as Supervisor of Engineering in the company's Process Equipment Division. He heads up the application engineering function for several lines of Enterprise special products.

The appointment was announced by Wm. Clausen, Enterprise vice president and general manager.

Boomer was most recently plant superintendent at Buena Park, California, for the Vegetable Oils Division of Glidden Company. His 22 years in the field includes application experience with several industrial processors of food products.

Archer-Daniels-Midland Appoints Publicity Manager

John A. Wickland, former Minneapolis Tribune staff writer specializing in business news, has joined Archer-Daniels-Midland Co. of Minneapolis as publicity manager, it was announced by Gene Fowler, director of public relations and advertising.

Diesel Control Corp. Sells Buda Engines in L. A.

Diesel Control Corporation, Wilmington, Calif., has been appointed Los Angeles County factory marine distributor for the Buda Engine division of Allis-Chalmers Company.

Stanley Franklin is president of Diesel Control, and Buda engine sales activities will be under the control of Leonard Grant.

The company has enlarged its plant at Wilmington where there is an extensive fuel system overhaul shop.

The Allis-Chalmers-Buda line includes diesel propulsion engines, ranging from 9 to 51-hp. and a complete line of diesel generating plants for shipboard service.

Benjamin Tobin Jr. Becomes Director for American M.A.R.C.

Benjamin Tobin Jr., has been elected a director of American M. A.R.C., Inc., Inglewood, Calif., is announced by W. Denis Kendall, president of the diesel engine manufacturing company. Tobin is president of Continental Sales & Service Co. of Los Angeles, which recently became Western distributor of American M.A.R.C.-Hallett Diesel engines for the marine and industrial markets.

Current production of American M. A. R. C. engines includes both air and water cooled engine models that, it is claimed, bring large diesel engine economy to the users of small engines. Recently ten American M. A.R. C. air-cooled engine-generator sets were shipped to Alaska for use as emergency power units.

New Model Lathrop Engines In Process of Development

Several new model engines are currently in the process of development by The Lathrop Engine Co., according to a letter received by **Pacific Fisherman** from C. B. Herrmann, general manager, writing from the company's headquarters in Mystic, Conn.

The plans of this company, which has been manufacturing marine engines for a period of 59 years, call for the acquisition of other products for manufacture and sale.

Lathrop engines are widely used in the fishing fleets of the Pacific Northwest, where they have been distributed for many years by the H. G. McLaughlin Co., Seattle.

Chrysler Offices Moved

Administrative sales offices and engineering department of Chrysler Marine and Industrial Engine Corporation are now located at 7700 Russell Street, Detroit 11, Michigan. These offices were formerly located at Trenton, Michigan.

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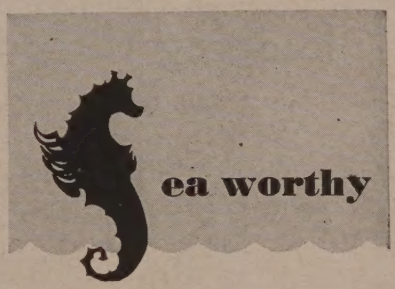

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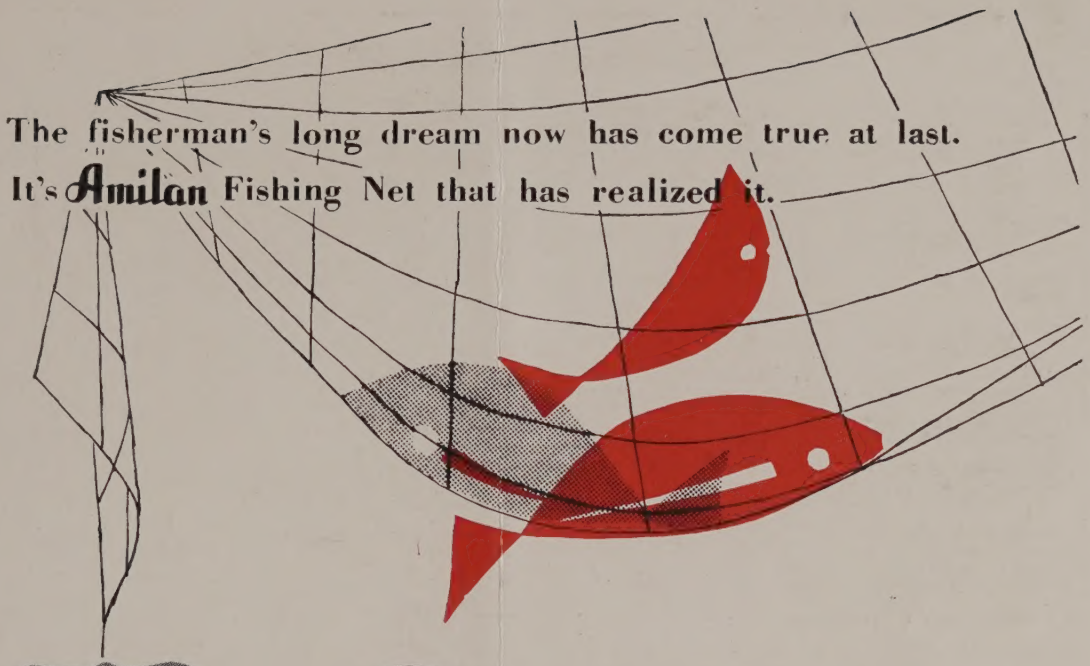

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The world's highest workmanship plus these unique merits is the world famous "Amilan" Fishing Net. It always carries the label shown above. "Amilan" is the trade mark of our nylon. Toyo Rayon Co., Ltd., Du Pont's exclusive licensee in Japan on nylon production.

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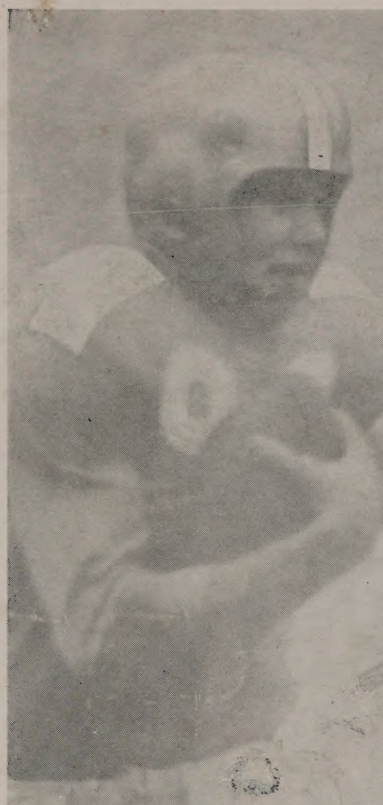

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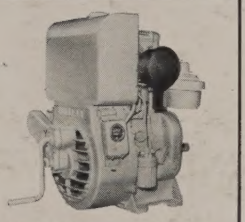
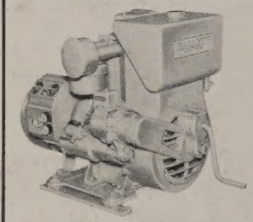
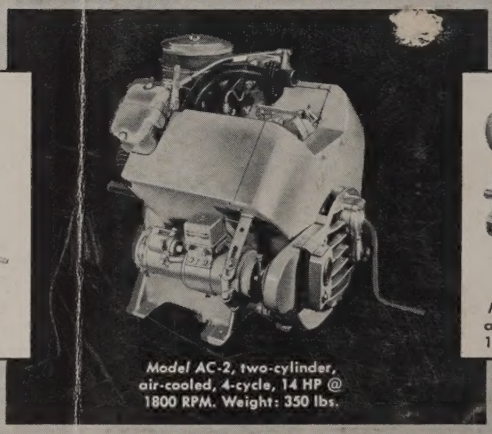


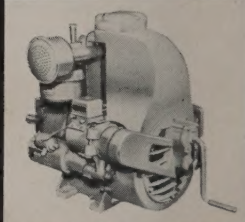
Model WC-1, one-cylinder, water-cooled, 4-cycle, 6 HP @ 1800 RPM. Wt.: 220 lbs.



Model A1Q-3KW, one-cylinder, air-cooled, 4-cycle, 3KW @ 1800 RPM, 6-7 HP



Model AC-2, two-cylinder, air-cooled, 4-cycle, 14 HP @ 1800 RPM. Weight: 350 lbs.



Model AC-1, one-cylinder, air-cooled, 4-cycle, 6 HP @ 1800 RPM. Weight: 220 lbs.

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